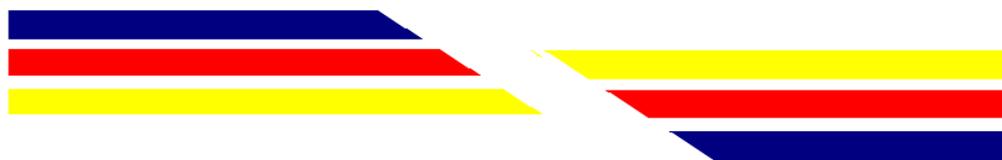


# **AIR TRAFFIC MANAGEMENT DEPARTMENT**



## **LOCAL AIR TRAFFIC CONTROL INSTRUCTIONS LATCI**

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# 1 PURPOSE AND SCOPE

The purpose of the Local Air Traffic Control Instructions is published pursuant to subchapter 408 and 409 of the Liberia Civil Aviation Act and is intended to standardize operating procedures for Air Traffic Services in the airspace of Liberia within the Roberts TMA and especially at the Roberts International Airport in accordance with International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPS).

These procedures cover the airspace of Liberia within the Roberts TMA at or below 10,000 feet or FL100 and all IFR/VFR flights arriving at, or departing from Roberts International Airport/Domestic aerodromes and flights transiting the Roberts Terminal Control Area (TMA)/ Control Zone (CTR).

## 2 ATS UNITS

The ATS unit at RIA provides Approach Control, Aerodrome Control and Ground Control Services with the aim of achieving air traffic services objectives such as separating aircraft to prevent collisions, to organize and expedite the orderly flow of traffic, and to provide information and other support for pilots such as:

- A. Runway and taxiway information
- B. Information on the status of navigation aids and other supporting services;
- C. MET information as provided by the MET office;
- D. Search and rescue when necessary.

## 3 ATC POSITIONS

As required by the Liberia Civil Aviation Authority, the ATC Unit has three separate positions. These positions are: approach, aerodrome and ground control. Each position is assigned a specific task as indicated below:

### 3.1 Approach Control

Approach control (APC) is responsible for all arriving aircraft released to it by ACC and airborne aircraft after they are handed over by the TWR until they can be transferred to ACC.

Approach control (APC) is also responsible to handle all IFR traffic leaving or arriving at SPRIGGS and transiting or operating within Roberts TMA (100 NM) radius centered on the DVOR up to and including FL 100.

### 3.1.1 Arrival

Aircraft that is approaching with the intension of landing at Roberts International Airport or SPRIGGS Payne aerodrome and may have been released by the Area Control Centre (ACC); at the TMA, at or above FL100 as traffic permits or at least 15 minutes to the estimated time of arrival (ETA).

### 3.1.2 Departure

Aircraft that is taxiing with the intension of leaving Roberts International Airport or SPRIGGS Payne aerodrome for another destination; such aircraft must be released by the Aerodrome Control (ADC)/SPRIGGS Tower not later than 3 minutes after airborne or before entering instrument meteorological conditions (IMC), whichever is earlier.

- To maintain control with such aircraft until it is released to ACC at or before passing FL100.
- To maintain control of all VFR Traffic above 3000 feet within the TMA up to FL095.

## 3.2 Aerodrome Control (ADC)

Aerodrome Control is responsible for providing air traffic services to all aircraft operating within the Roberts CTR (15NM) radius centered on the DVOR below 3000 feet and all arriving aircraft released to it by APC and to all departing aircraft before being released to APC.

ADC is responsible for the control of all helicopter(s) departing from Roberts/Spriggs or arriving at Roberts/Spriggs and transiting through the Roberts Control Zone (CTR) until 50NM from Roberts.

Additionally, ADC is also responsible to provide information to AIS on arriving/departing aircraft such as: ETA's/ETD's or any amendment thereof, delays, diversion and any pertinent information.

### 3.2.1 Arrivals

APC should hand over the traffic to TWR once established on the ILS/or when landing is assured in the case of weather below 1500 feet.

### **3.2.2 Departures**

#### **A. IFR traffic**

The transfer to approach control (APP) is done 3 minutes after airborne or before the aircraft enters instrument meteorological conditions (IMC) or before entering the active runway, whichever is earlier.

#### **B. VFR traffic**

VFR traffic remains under control of TWR until leaving Roberts Control Zone except all VFR Traffic above 3000 feet within the TMA up to FL095. Helicopters remain with TWR and report 50 nm for operation normal (UNMIL Procedure).

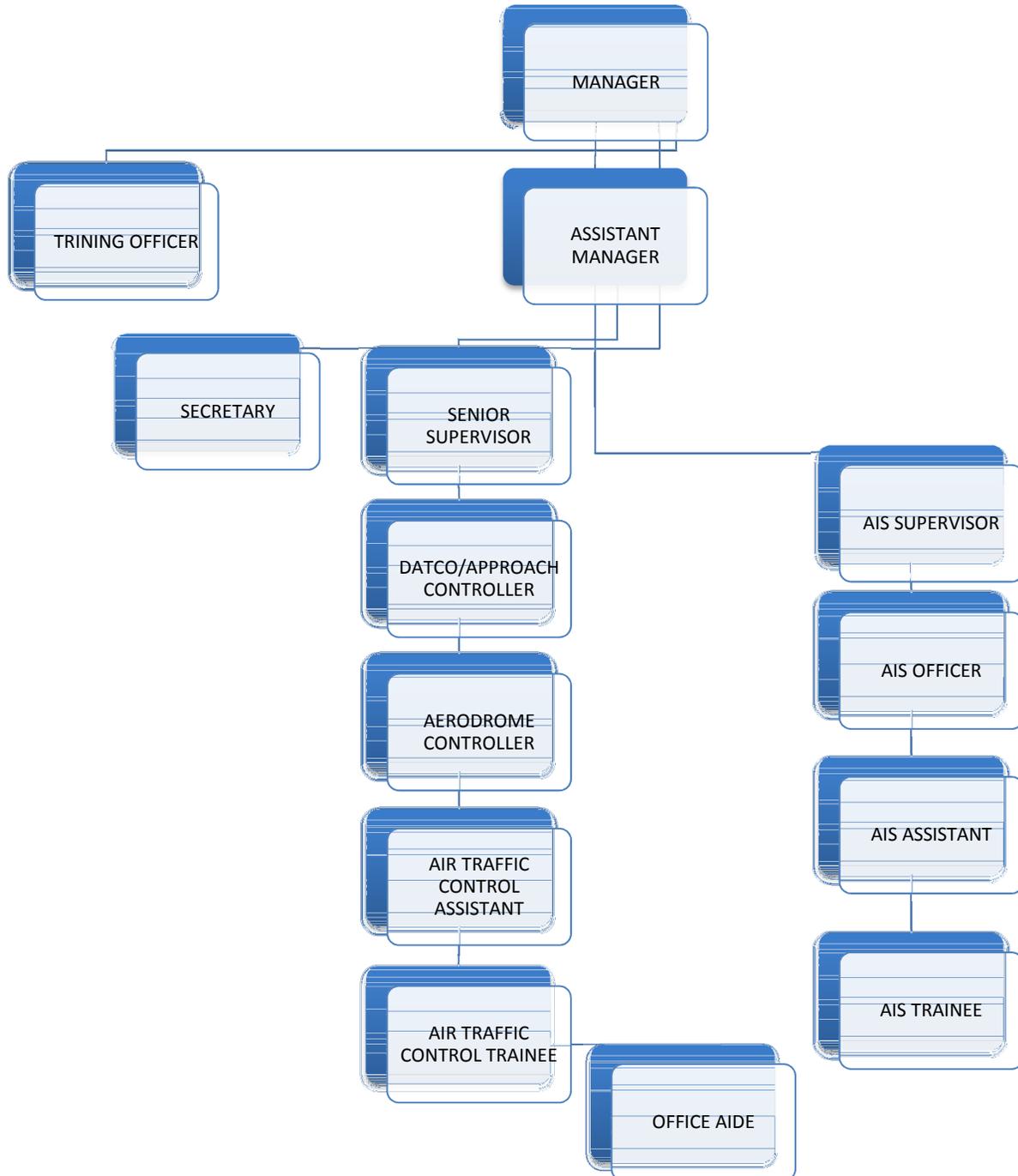
### **3.3 Ground control**

Ground Control is responsible for the control of vehicle and pedestrian within the airport "Manoeuvring" area which generally includes runways, all taxiways, holding areas, excluding the apron. Any vehicle or person walking or working in these areas is required to request clearance from Ground Control. This is done via VHF radio, but there may be special cases where other processes are used.

Aircraft or vehicles without radios must respond to ATC instructions via aviation light signals from the control tower or else be led by vehicles with radios. People working on the Manoeuvring Area must have a communications link through which they can communicate with Ground Control, commonly by handheld radio.

Ground Control is vital to the smooth operation of the airport, because this position impacts the control of vehicles and pedestrian, affecting the safety and efficiency of the airport's operation.

## 4 ORGANIZATION CHART



## 5 JOB DESCRIPTIONS

Air Traffic Controllers (often shortened to ATCOs) ensure the safe and orderly movement of air traffic in our skies. It's the job of ATCOs to maintain their safety and correct position, and manage the flow of aircraft within Roberts TMA/CTR. With escalating volumes of air traffic (5% more every year), maximizing efficient use of controlled airspace has in recent years become an increasingly important aspect of air traffic control. ATCOs communicate with pilots and instruct them to maintain or alter their height, speed and course, using visual contact, radio and a suite of other communication technologies. The ATCO roles include Approach Controller, dealing with aircraft movement into and out of the airport and Aerodrome Controller, guiding aircraft through landing and to the terminal, including safe landing, take-off and taxi.

### 5.1 Manager Air Traffic Management (MATM)

The MATM is responsible to the Director General for:

- a) Ensuring that the ATMD (ATC/AIS) operates efficiently and is administered in accordance with relevant provisions;
- b) Directing the work of ATC and AIS personnel and interpreting regulations so as to ensure conformity with ATC procedures;
- c) Supervising the training of ATC/AIS personnel and make recommendations for the issuance and validation of ratings for controllers;
- d) Investigating reports of non-compliance with regulations and procedures and forwarding the result of such investigations to the Director General LCAA;
- e) Maintaining close liaison with local operators and interested organizations and providing all possible assistance to flight crew in familiarizing them with ATC procedures and other operational procedures and regulations;
- f) Ensuring that all necessary technical equipment, publications and facilities are available and properly maintained;
- g) Preparing and issuing unit orders and local knowledge questionnaires for use in rating and validation examinations;
- h) Maintaining records and submitting reports on personnel, traffic activity and all phases of ATC operations as required;
- i) Standing a watch in each operating position often enough to maintain proficiency for the ratings held;
- j) Representing the Department in Technical Meetings, Conferences, Seminars, Workshop and share the decision/information with staff;
- k) Maintaining discipline, efficiency and proper department of ATS personnel
- l) Ensuring that the Company vehicle is serviced adequately at required intervals and in functional state;

- m) Ensuring that adequate security measures are maintained at the Air Traffic Control Tower (ATCT).

## 5.2 Assistant Manager

The Asst. Manager is responsible to the MATS for:

- a) Acting in the stead of the Manager Air Traffic Services during his absence ;
- b) Assisting in directing the work of ATC and AIS personnel and interpret regulations so as to ensure conformity with ATC procedures;
- c) Assisting in investigating reports of non-compliance with regulations and procedures and forwarding the result of such investigations to the Manager;
- d) Assisting in maintaining close liaison with local operators and interested organizations and providing all possible assistance to flight crew in familiarizing them with ATC procedures and other operational procedures and regulations;
- e) Assisting in ensuring that all necessary technical equipment, publications and facilities are available and properly maintained;
- f) Assisting in the preparation and issuance of unit orders and local knowledge questionnaires for use in rating and validation examinations;
- g) Assisting in maintaining records and submitting reports on personnel, traffic activity and all phases of ATC operations as required by the department;
- h) Reviewing and approving work schedules prepared by the ATC Senior Supervisor and AIS Supervisor;
- i) Undertaking shift – supervisory responsibilities as assigned;

## 5.3 Training Officer

The training officer is responsible to the MATS for:

- a) Instructing and / or training new recruits, air traffic control assistant and implement all aspects of air traffic services training program, including aerodrome and approach trainees;
- b) Coordinating the selection of personnel for training;
- c) Promoting discipline, efficiency and proper department of ATS personnel;
- d) Ensuring that staff assigned operate in accordance with approved policies, standards and procedures;
- e) Recommending system improvement;
- f) Undertaking shift – supervisory responsibilities as assigned;

- g) Participating in the development of training programs covering equipment utilization;
- h) Developing and revising training programs to satisfy requirements;

## 5.4 Secretary

The secretary is responsible to the MATS for:

- a) Maintaining records and submitting reports on personnel, traffic activity and all phases of ATC operations as required by the department;
- b) Compiling of aeronautical documents
- c) Typing of reports, letters and other correspondents.

## 5.5 Senior supervisor

The senior supervisor is responsible to the asst. manager ATS for:

- a) Directing and co-ordinate the control of air traffic within the Roberts TMA/CTR;
- b) Monitoring the character of personnel on duty and adjusting the functions of operating positions so as to meet the traffic demand in an adequate manner;
- c) Ensuring that operating positions are occupied by qualified personnel who are in current operating practice and ensure that staff are kept operationally proficient;
- d) Maintaining the ATS log and ensure that all relevant details are recorded;
- e) Carrying out frequent checks on the flight progress strips, communications channels and messages originated in the air traffic control tower (ATCT) and draw the attention of personnel concerned to any errors, omissions, irregularities or the use of non-standard procedures;
- f) Reporting to the manager, through the assistant manager on:
  - 1) all phases of ATC operations requiring the manager's attention;
  - 2) changes in serviceability of navigational and ATC equipment and facilities;
  - 3) non-compliance with regulations and procedures;
  - 4) complaints or incidents involving the ATC service;
  - 5) any other matters of general operational interest;

- g) Recommending to manager, through the assistant, improvements to procedures and operating methods;
- h) Ensuring that staff under training are fully occupied either by on-the-job training, study or related activity;
- i) Standing a watch in each operating position often enough to maintain proficiency for all ratings held;
- j) Preparing monthly work schedule for the unit to be approved by the manager or assistant and undertake shift.

## 5.6 Approach Controller

The approach controller is responsible to the senior supervisor for:

- a) Take over pilot contact from the Area Controller once the aircraft is within range of the airport.
- b) Sequence the most efficient order for aircraft to take off or land.
- c) Give the pilot clearance to approach the airport.
- d) control air traffic within the Roberts TMA/CTR;
- e) undertake shift and remain in the control room during the period of watch unless properly relieved;
- f) render all possible assistance to aircraft in emergency or distress;
- g) provide aircraft with meteorological and other information required for the safe and efficient conduct of their flight;
- h) maintain a continuous watch on the assigned communication frequencies and telephone/intercom;
- i) Maintain, in the approved manner, a flight progress display of all aircraft for which she/he is responsible;
- j) Relay serviceability reports and navigational warnings to the COMMS maintenance as required;
- k) Comply with procedures detailed in unit operating instructions including those pertaining to:
  - 1) opening and closing operating positions;
  - 2) taking over an operating position;
  - 3) unserviceable equipment and facilities;
- l) Performing such other duties relative to ATC operations as may be assigned to her/him by the Manager or watch supervisor.

## 5.7 Aerodrome Controller

The aerodrome controller is responsible to the approach controller/senior supervisor for:

- a) instructs aircraft to take-off or land safely
- b) monitors aircraft during landing and take-offs
- c) control air traffic within the Roberts CTR;
- d) maintain, as far as practicable, a continuous watch on all visible operations on and in the vicinity of the aerodrome, including aircraft, vehicles and personnel on the manoeuvring area;
- e) carry out aerodrome and facility inspections;
- f) remain in the control room during the period of watch unless properly relieved;
  
- g) provide aircraft with meteorological and other information required for the safe and efficient conduct of their flight;
- h) maintain a continuous watch on the assigned communication frequencies and telephone/intercom;
- i) maintain, in the approved manner, a flight progress display of all aircraft for which he is responsible;
- j) relay serviceability reports and navigational warnings to the COMMS maintenance as required;
- k) comply with procedures detailed in Local Air Traffic Control Instructions (LATCI) including those pertaining to:
  - 1) opening and closing operating positions;
  - 2) taking over an operating position;
  - 3) unserviceable equipment and facilities;
  
- l) performing such other duties relative to ATC operations as may be assigned to her/him by the Manager or watch supervisor.

## 5.8 Air Traffic Control Assistant (ATCA)

The air traffic control assistant is responsible to the senior supervisor for:

- a) maintain, as far as practicable, a continuous watch on all visible operations on and in the vicinity of the aerodrome, including aircraft, vehicles and personnel on the manoeuvring area and inform the aerodrome controller when necessary;
- b) assist in carry out aerodrome and facility inspections;
- c) remain in the control room during the period of watch unless properly relieved;
- d) render all possible assistance to aerodrome controller;
- e) provide aerodrome /approach controller with meteorological and other information required for the safe and efficient conduct of their flight;
- f) maintain a continuous watch on the assigned communication frequencies and telephone/intercom;
- g) assist in relaying serviceability reports and navigational warnings to the COMMS maintenance as required;
- h) comply with procedures detailed in Local Air Traffic Control Instructions (LATCI) including those pertaining to:
  - 1) opening and closing operating positions;
  - 2) taking over an operating position;
  - 3) unserviceable equipment and facilities;
- i) Performing such other duties relative to ATC operations as may be assigned- to her/him by the aerodrome /approach controller.

## 6 QUALIFICATIONS

### 6.1 Academic

There are no specific subject requirements for graduates wishing to pursue a career as an ATCO. Science and mathematics would be advantageous, however, as these subjects require numeracy, spatial awareness and technical knowledge – key requirements for air traffic control. A degree is not a prerequisite for the job, as all candidates are required to undergo a rigorous selection procedure and training scheme. The entry requirements for applicants are:

1. BSC Degree (Major in English, physic or Mathematics) is preferable.
2. Minimum high school graduate with WAEC certificate.
3. Age 18-30 years.

## 6.2 Physical

Air traffic control, while not an especially active career, is a physically demanding area to work in. ATCOs work long hours and must ensure accuracy and clear communication. The following are therefore essential:

1. good spatial awareness
2. good eyesight and normal color vision (no color blindness)
3. good hearing
4. a clear speaking voice and excellent verbal communication skills
5. a high level of general health and fitness
6. resilience

There are no other specific entry requirements but it may be worth noting that currently 75% of ATCOs are male. There are no particular barriers for women wanting to join the industry, but it remains a male-dominated field.

## 6.3 Skills

ATCOs have a position of great responsibility and often need to work under pressure. Key skills and qualities include:

1. ability to remain calm in high stress/emergency situations
2. decisiveness and confident decision-making skills
3. a degree of emotional detachment
4. ability to make rapid calculations and judgments, including distances and angles
5. excellent levels of concentration, not easily distracted
6. good teamwork
7. excellent organizational skills
8. a logical and thorough approach

## 6.4 Experience

No experience is needed in order to enroll on an ATC training course. The training program may last 6-18 months, and involves practical and theoretical components. The course is shorter for Aerodrome/Approach Controller trainees. Once trainees have satisfactorily completed the course, they are posted to operational units as ATCA, where a further two years of on-the-job training as a trainee air traffic controller is undertaken. This is known as the “validation” period.

## 7 CAREER PROGRESSION

### 7.1 Promotion

Air traffic control has a well-defined career structure, with trainees undertaking their two year validation and then progressing to join the qualified ATCO ranks. There is perhaps less age variation than in other industries due to the restrictions on minimum and maximum ages at entry. Note that 80% of ATCOs remain operational controllers for the duration of their career, although there are some opportunities for progression as detailed below.

### 7.2 Roles

Once experienced as an ATCO, potential roles include:

1. Training instructor (mentoring and assessing trainee ATCOs)
2. Operational watch supervisor (managing fellow ATCOs)
3. Non-operational ATCO, outside the ACC or airport, and based at a training college or evaluation center
4. Incident investigator (analyzing errors and operational problems)

## 8 CONTROL ROOM ADMINISTRATIONS

### 8.1 Hours of Operation

The ATC Unit operates 24/7 and currently runs three shifts with at least two (2) personnel per shift based on the following:

SHIFT	START	END
First	0730	1430
Second	1430	2230
Third	2230	0730

### 8.2 Watch Keeping Schedule

A watch-keeping Schedule for the ATC Unit shall be prepared by the assistant SATCO or the Senior Supervisor and approved by the SATCO.

The watch schedule should be published not later than the 28<sup>th</sup> day of each month and shall show the shifts of watch-keeping and hours of duty required of individual Controllers throughout the following month.

### **8.3 Swapping of Shift/Leaving Duty**

Controllers are not allowed to swap shift without the approval from SATCO and an agreement must be written and signed in the ATC attendance log book at least a day prior to the effective date.

Additionally, controllers are not allowed to leave the control room without being properly relieve. However, any controller desiring to leave duty before his/her quitting hour must inform the SATCO and arrange to have a colleague to sit in before leaving.

### **8.4 Problematic Use of Psychoactive Substances**

No air traffic controller shall undertake her/his functions while under the influence of any alcoholic beverages or any stimulant substances including drugs eight hours (8hrs) prior to resumption of duty and while on active duty.

### **8.5 Confidentially**

All controllers are to adhere to the confidentiality agreement signed with the Liberia civil aviation authority. Moreover, no controller is to discuss pertinent issues in the public to traffic, incidents, accidents, etc.

### **8.6 Take over Watch (TOW)**

Prior to taking over watch or an operating position, a controller must:

1. ensure that she/he has a full understanding of the air traffic situation including an awareness of clearances issued but not yet acted upon and any developing situation requiring early attention;
2. familiarize himself with the serviceability of all equipment under her/his charge and responsible to be used during watch keeping (e.g. radio, approach aids, telephone lines and aerodrome lighting);
3. obtain all relevant information and be familiarized with the meteorological condition and trends for the period of watch and where practicable get a personal briefing from a meteorological office;
4. ensure she/he is fully conversant with the latest promulgated orders, instructions, notices and information, particularly with reference to the serviceability of aerodromes and other air navigation facilities;
5. note should be taken of details regarding any presidential, VIP or other special flights expected during the period of watch.
6. sign on in the log or at the operating position, as having accepted responsibility for the position.

## 8.7 Hand over Watch (HOW)

Prior to handing over watch or an operating position, the controllers must:

1. ensure that she/he provide their successors with the fullest possible information regarding the current traffic situation, including any items of specific interest or urgency,
2. in the interests of safety or continuity of operation, the controller handing-over is required to remain on duty to complete any associated actions, subsequent reports and records before handing over watch rather than transfer the responsibility for completion to another controller.
3. sign the Air Traffic Control Log as having handed over watch When the Controller taking over is fully conversant with the air traffic situation and is prepared to assume full responsibility for the watch.

## 8.8 Handing-Over an Operational Position

The responsibility for the accuracy of the hand over lies with the person vacating an operational position. This does not remove all responsibility from the Controller taking over who must be aware that the Controller being relieved may well be exhausted. The order in which information should be passed from one controller to another should be as follows:

- a) General information, including any variations from routine operations;
- b) Other supplementary information relating to the position;
- c) The detailed traffic situation.

The Controller taking over must be alerted to the possibility of errors and omissions in the information given. She/he must verify the data transferred by a thorough check of the flight progress strips and any other relevant information. She/he must also clearly indicate to the Controller handing over when he is ready to accept responsibility for the operational position/watch.

## 8.9 Visitor(s)

Absolutely no unauthorized visitor(s) shall be allowed to have access to the ATS Operation Room. Only the Management or SATCO shall have the authority to arrange visitation into the ATS operation room by the following:

1. Student tour group(s);
2. Guests for fact finding;
3. Any other group(s) as may be deemed necessary.

Before bringing visitors into the control room, a check shall be made with the Senior Air Traffic Control Officer (SATCO) as to whether the traffic situation makes it convenient to do so. At no time shall visitor(s) be allowed to interfere with the smooth running of the watch.

## 8.10 ATC Log

The ATC log serves to record all significant occurrences and actions relating to operations, facilities, equipment and staff. It is an official document and, unless otherwise authorized, its contents should be restricted to those personnel requiring access to the information.

The supervisor on duty must be responsible for opening, closing and maintaining the log. All entries should be made in an indelible manner and erasures should not be permitted. Incorrect information should be struck out and the correct information inserted near it.

The type of information to be recorded in the ATC log should, include such matters as:

No.	OCCASION	INFORMATION
-----	----------	-------------

1.	At the commencement of each day's operation	<ul style="list-style-type: none"> <li>▪ Day, date and time; a new sheet in the log should be started at 0001 UTC.</li> </ul>
2.	On assuming responsibility for a position	<ul style="list-style-type: none"> <li>▪ ATC incidents, accidents, non-compliance with regulations or air traffic control ATC clearances, regardless of whether an additional, separate report is required;</li> <li>▪ Action take in relation to any SAR activity including distress communications;</li> <li>▪ General notes concerning essential aerodrome information, such as the results of aerodrome inspections, closure of sections of the manoeuvring area caused by works or natural phenomena, etc;</li> <li>▪ Time of aerodrome closure and reopening, with reason for the closure;</li> <li>▪ Change in status of facilities, services or procedure, including communication difficulties and test;</li> <li>▪ Short term changes in staffing or hours of coverage, including variations to required staffing level;</li> <li>▪ Status of navigation aids;</li> <li>▪ Details of work in progress and other essential aerodrome information;</li> <li>▪ Time of receipt of special aerodrome reports, SIGMET reports, or any other significant meteorological phenomena.</li> </ul>
3.	Handover/takeover	<ul style="list-style-type: none"> <li>▪ A resume of outstanding action and unusual operations which are current or anticipated, relating to traffic display and/or SAR activity;</li> <li>▪ The status of communications and equipment;</li> <li>▪ The time of handover/takeover, against the signatures of the officers involved.</li> </ul>

Recording of information should be completed in the following manner:

- a) entries should be made by any controller on duty; a full signature or authorized initials should accompany each entry;
- b) the time of entries must be recorded in Universal Coordinated Time (UTC) and entries should be in sufficient detail to give readers a complete understanding of all actions taken. Strict attention should be given to the time an incident occurs and the time at which action is initiated;
- c) entries should be made in chronological order and, so far as is possible, concurrently with the occurrences and actions. When, during emergencies or busy times, it is not possible to make detailed entries in the log at the time of the occurrence, rough notes should be kept with exact times and a detailed log entry made as soon as possible thereafter;
- d) any entry requiring to be brought to the notice of the SATCO should be so annotated;
- e) a new sheet in the log should be started at 0001 GMT.

## 8.11 Inspection of Log Books

The SATCO must review the ATS log at least once every working day, taking note of all significant entries. All personnel should read those log entries of concern to them which were made during the period since the end of their last duty before accepting responsibility for an operating position.

## 8.12 Impounding Of Log Books

The Senior Air Traffic Control Officer (SATCO) has full authority to impound the Air Traffic Control Log if he/she considers that its content may throw any light on a particular accident/incident. When such action is taken, the log should be withdrawn after the request is made and handed over to Management. In these circumstances, a replacement logbook must be opened.

The ATS Log must be retained at the ATC (SATCO's) office for a period of one year after the date of closing and then destroyed locally.

## 8.13 Flight Progress Strips

The Duty Air Traffic Control Officer (DATCO) of the second shift must ensure that the flight progress strips are prepared for the next day before handing over watch to the third shift.

The flight progress strips should be retained in the monthly envelopes for a period of one year after the date of closing and then destroyed locally.

## 8.14 Flight Movement

The Duty Air Traffic Control Officer (DATCO) of the third shift should ensure that the used IFR/VFR flight progress strips are recorded on the flight movement form for the day before handing over watch to the first shift.

The flight movement should be retained for a period of one year after the date of closing and then destroyed locally.

## 8.15 Light Intensity

The lighting system in use at RIA is a low intensity edge lighting two (2) stages, white Omni-directional elevated edge light at 200 feet interval and on remote frequency control to be used in different weather conditions, by day and night. These settings may be varied at the controller's discretion or at the request of a pilot, provided that other aircraft will not be adversely affected

## 8.16 Withholding Clearance

The Director General Liberia Civil Aviation Authority is empowered to prohibit flight and he/she may instruct controllers to withhold an ATC Clearance.

# 9 AIRSPACE MANAGEMENT

## 9.1 Description

The Roberts Terminal Control Area (TMA) is within the Roberts Flight Information Region (RFIR) and as relate to RIA is; 100 Nautical Miles (NM) centred on the Roberts DVOR extending upward from 6000 feet (AGL) to 10000 feet (Flight Level 100).

The Roberts Control Zone (CTR) is within the Roberts TMA 15 Nautical Miles (NM) centered on the Roberts DVOR extending upward from above ground level (AGL) to 3000 feet.

To permit light aircraft transit the Roberts CTR and to separate VFR from IFR flights making Instrument Approach to Runway (RWY) 04 or departing aircraft from RWY 22, a VFR Corridor is established along the shoreline 28 NM, extending upward from above ground level (AGL) to 500 feet and 1 (one) NM wide.

No.	Airspace	
1	Designation and Lateral Limits	Roberts TMA; 100 NM

2	Vertical Limits:	FL 100
3	Airspace Classification	Class D
4	Transition Altitude:	3000 feet
5	Transition Layer	2000 feet
6	Transition Level	FL 50

## 9.2 Classification of Controlled Airspace

The Roberts Control Zone (CTR) is classified as class “D” airspace.

## 10 LOCAL FLYING RESTRICTIONS

- Runway 22 Threshold permanently displaced 1200 Feet
- Danger area Camp Kessely – Gnd/6500 Feet; Aircraft departing Runway 22 must turn right within 6.8 Nautical Miles.
- No instrument approach Runway 22
- Roberts Control Zone IFR at all times, all aircraft operating in the control zone must have two-way radio communication with Roberts ATC.
- Roberts is available only to aircraft capable of maintaining two-way radio communication with Roberts ATC.

## 11 HEIGHTS OF OBSTRUCTIONS/MAST

NO.	OBSTRUCTION/MAST	HEIGHT
1.0	Bassa Hills	1,214 Feet
2.0	LAMCO Mast (LIBER CELL)	148 Feet
3.0	“MO” Mast	141 Feet
4.0	Lonestar Telecommunication Company Mast	131 Feet
5.0	Control Tower	100 Feet
6.0	CELLCOM Mast	
7.0	COMIUM Mast	

## 12 COMMON WEATHER PHENOMENA

- Two Seasons – Dry and Rainy or Wet.
- Rainy Season – April to October.
- Dry Season November to March.
- Fog and Haze occur from December to February

## 13 RADIO NAVIGATION AND LANDING AIDS

Type of aid	ID	Frequency	Hours of	Site of	Elevation of	Remarks
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			Operations	Transmitting Antenna Coordinates	DME Transmitting Antenna	
DVOR/DME	ROB	113.8 MHz	H24	No. 6°13'52.1" W010°21'56.3"	Sited 486FT SW CL4044FTW THR RWY 04 Range 200NM	From ARP GLRB Channel 85X Co- Located With VOR
NDB	FOR	263 KHz	H24	No.6°12'00" W010° 22'00"	222M/1.37NM THR RWY 04	1.37NM From The RWY to Monitor
ILS/LLZ	SK	110.3 MHz	H24	No.6°41'52.1" W010° 21'14"	222M/11322FT on CL THR RWY 04	25 NM DME Channel 40X
ILS/GP		335.0 MHz	H24	No.6°13'25.6" W010° 22'10.7	Sited 395 FT SW CL 1040 FT W THR RWY 04	Angle 2.99 Degrees

## 14 ATS COMMUNICATION FACILITIES

Service Designation	Call Sign	Frequency		Hours Of Operation	Remarks
		Transmits	Receives		
1	2	3		4	5
Approach	Roberts	124.5 MHz	124.5 MHz	H24	UPS/Battery

	Approach	8861 KHz	8861 KHz		Operated Emergency XX Int'l Distress
Tower	Roberts Tower	118.3 MHz 8861 KHz	118.3 MHz 8861 KHz	H24	UPS/Battery Operated Emergency XX Int'l Distress
Ground	Ground Control	121.9 MHz	121.9 MHz	H24	UPS/Battery Operated Emergency XX Int'l Distress
Flight Operations	Roberts Operations	131.4 MHz	131.4 MHz	During Flights Movement	Flight Dispatch
Emergency	Mayday	121.5 MHz	121.5 MHz	H24	UPS/Battery Operated Emergency XX Int'l Distress
SPRIGGS Airport	SPRIGGS Tower	118.7 MHz	118.7 MHz	Operate from sunrise – sunset	Battery Operated
Area	Roberts Control	128.1 MHz	128.1 MHz	H24	UPS/Battery Operated Emergency XX Int'l Distress
Runway Light		123.05 MHz	123.05 MHz	H24	Battery Operated

## 15 PROCEDURES

### 15.1 Filing of Flight Plan

Flight crews of aircraft electing to fly VFR are expected to comply with the requirements of Rules of the Air, Annex 2 and Air Traffic Services Annex 11.

The required method for aircraft departing Roberts International Airport (RIA) desiring to operate IFR flight is to file an IFR flight plan at the Aeronautical Information Service (AIS) either by the flight crews or their designated representative(s). The flight plan will be transmitted before approving start-up via:

- AMSH;
- VHF Radio;
- Telephone; or
- Intercom.

### 15.2 Circuit Procedure

Normal circuit direction is left hand standard pattern. Right hand circuit permitted on request or when deemed necessary by ATC.

Normal circuit height is 1500 feet.

Normal circuit direction helicopters left/right 500 feet.

### 15.3 Inbound Traffic – IFR

When released by Roberts ACC, aircraft shall contact Roberts Approach on 124.5 MHz aircraft callsign, flight level, point of departure, estimated time arrival, persons on board, fuel endurance and any request (e.g. 10 DME ARC, straight-In-Approach or visual approach).

Aircraft will be instructed as follows:

- Descent to transitional level (FL 050) if traffic condition permits.
- Initial approach, at 25 DME aircraft will be cleared to transitional altitude (3000 feet) for the approach.
- 10 DME, Report crossing radial 151 from east/301 from west.
- Cleared to 1500 feet by approach control and contact Roberts tower on 118.3 MHz
- Report over ROB DVOR if making a procedure turn approach maintaining 3000 feet.
- Straight in approach, report establish on the localizer.
- Report left/right downwind when requested.
- Report final.
- Land as instructed by ATC.
- Report runway vacated – IMC.
- Taxi as instructed by ATC.

### 15.4 Inbound Traffic – VFR

Aircraft or Helicopter must Contact Roberts Tower 118.3 MHz before entering the control zone boundary (helicopters 50 DME) and give the following:

- Callsign
- Point of Departure
- Estimated Time of Arrival (ETA)
- Person on Board (POB)
- Fuel Endurance
- Entry point
- Any other information

Aircraft or Helicopter will be cleared as follows:

- Report entry point;

- Report aerodrome in sight for right/left circuit based on the direction, if traffic condition permits;
- Report downwind, with intentions if any;
- Report Final;
- Touch and go-around as instructed by ATC
- Clear to Land.
- Taxi as instructed by ATC.

## 15.5 Outbound Traffic – IFR

Prior to start-up, call Roberts Tower 118.3 MHz, stating callsign, destination, flight level indicating person on board and fuel endurance.

Aircraft or Helicopter will be cleared as follows:

- Tower will give runway-in-use, wind direction and speed, QNH or QFE when requested, temperature and time.
- Tower will clear aircraft to taxi to the holding point as directed by the Marshall.
- Tower will issue ATC Clearance.
- At holding point runway 22, report when ready for departure.
- When traffic permits, tower after giving pertinent information and wind velocity will give take of clearance.
- Aircraft requesting runway 04 for take-off shall be instructed to enter, back track runway 04 and report ready for departure.
- After airborne, tower should pass departure time to aircraft and instruct same to contact approach 124.5 MHz
- Aircraft should contact approach 124.5 MHz and give estimate of reporting point(s) and ETA of destination.
- For IFR departure report passing FL-100 and contact Roberts Control.

## 15.6 Outbound Traffic – VFR

VFR departure is to report leaving the control zone boundary (15nm) via the exit point (and 50 DME helicopters); change to en-route frequency 118.5 MHz as instructed by tower.

## 15.7 Fixed-Wing Go Around

When fixed wing aircraft reports or is instructed to go around, that aircraft will climb out and make a left turn runway 04 and right turn runway 22. Traffic information on any conflicting traffic will be given.

## **15.8 Missed Approached**

Climb straight ahead to 3000 feet QNH, advise ATC of intention and request further instruction.

## **15.9 Overhead Departure**

For separation purpose, aircraft may be instructed by ATC to climb to set course overhead the DVOR or over the existing facility.

For any reason, pilot wishing to climb to set course overhead the DVOR should inform ATC of his intention prior to departure or prior to executing such action.

## **15.10 Helicopter**

Helicopter routes for flights inbound and outbound Roberts Control Zone are identified alphabetically using VOR radials separation not less than 20 degrees apart and a minimum vertical separation of 500 feet and are instructed by ATC.

Visitation of helicopter pilots to the control tower is encouraged for orientation.

## **15.11 Letter of Agreement (Roberts Area Control Center (RACC))**

Roberts International Airport is within the Roberts FIR, and as such, a laid down coordination procedure is in place (Letter of Agreement).

## **15.12 SPRIGGS Payne Aerodrome**

During air traffic control service hours, Roberts Approach Control/Aerodrome Control will coordinate IFR/VFR arrivals, while SPRIGGS Tower will coordinate IFR/VFR departures, vice versa.

## **15.13 Runway-In-Use**

The aerodrome has one (1) runway available for IFR/VFR arrivals and departures.

DATCO will give clearance for the runways to be used based on wind velocity and traffic condition.

Variable direction circuits may be used at times in accordance with local air traffic control instructions (LATCI) in the interest of noise abatement, mostly in favour of VIP movement.

## **15.14 VIP Operation**

VIP flight operations exist when the president of the republic of Liberia is

departing/arriving or when a foreign president is visiting the country.

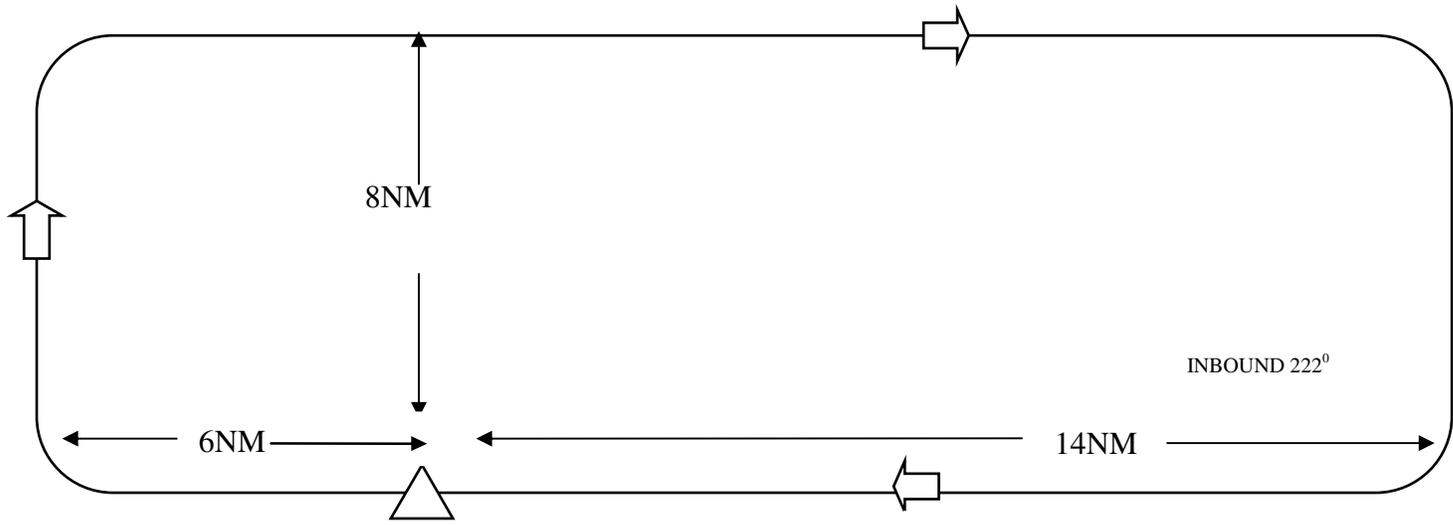
### 15.14.1 Action to be taken by ATC

Order the airport close to all other flights 45 minutes prior to arrival and 30 minutes after departure of the VIP flight in collaboration with the Director General LCAA.

Pass ETAs and other information concerning VIP flights to the Director General LCAA and the appropriate airport authority or their designated representatives.

### 15.15 Holding Pattern

The dimensions for the execution of the right hand holding pattern at RIA are indicated in the diagram below:



NOTE: THERE IS A TOLERANCE, 5NM ON THE NON-HOLDING SIDE (.) THAT AN AIRCRAFT CAN MAKE A TURN ABEAM THE FIX.

### 15.16 INSTRUMENT APPROACH

#### 15.16.1 10 DME ARC Approach Runway 04

The 10DME ARC Approach Procedure is a modified straight in Approach Procedure intended to save Fuel and Time. It enables Pilot to fly ARC of 10DME until established on the ILS Localizer inbound.

This Procedure is only available on Pilots request or ATC when Traffic condition permits.

**Initial Approach:** at 25DME the Aircraft will be cleared to 3000ft and to report entering the ARC.

**Intermediate Approach:** depending on the direction of Flight, the Aircraft shall report crossing Radial 151 East or 301 west for further descend to 1500ft, and to report established on the ILS Localizer.

**Final Approach:** when established on the ILS Localizer (042M) inbound descend on the Glide Path (Angle 2.99 degrees) to cross 4DME ILS at 1225ft on QNH (1196ft) above threshold elevation.

**Obstacle Clearance Altitude:** 129ft on QNH (100ft) above threshold elevation, if the Glide Path is inoperative 204ft on QNH (175ft) above threshold elevation.

**Missed Approached:** climb straight ahead to 3000ft on QNH advises ATC and request further instructions.

#### 15.16.2 LOCATOR “FOR” RUNWAY 04 (BASE ON THE MINIMUM TAS 135KTS)

**Initial Approach:** at 25DME the Aircraft will be cleared to 3000ft to the “FOR” Beacon (263 KHz).

**Intermediate Approach:** after passing the “FOR” NDB descend to 1500ft on QNH. Fly 2 ½ minutes on 222m and make a procedure turn to the left, follow by a right turn to establish on 042m.

**Final Approach:** when established inbound on 042m continue descend to decision altitude and cross 4DME at 1225ft on QNH (1196ft) above ground.

**Obstacle Clearance Altitude:** 369ft on QNH (340ft) above threshold elevation.

**Missed Approached:** climb straight ahead to 3000ft on QNH advises ATC and request further instructions.

#### 15.16.3 ILS “SK” RUNWAY 04 (BASE ON THE MINIMUM TAS 135KTS)

**Initial Approach:** at 25DME the Aircraft will be cleared to 3000ft to the “ROB” DVOR (113.8 KHz).

**Intermediate Approach:** after passing the DVOR descend to 1500ft on QNH. Fly 2 ½ minutes on 222m and make a procedure turn to the left, follow by a right turn to intercept the ILS/LLZ (110.3MHz).

**Final Approach:** when established inbound on 042m on the ILS/LLZ continue descend on the Glide Path (angle 2.99 degrees) to cross 4DME ILS at 1225ft on QNH (1196ft) above threshold elevation.

**Obstacle Clearance Altitude:** 129ft on QNH (100ft) above threshold elevation; if the Glide Path is inoperative 204ft on QNH (175ft).

**Missed Approached:** climb straight ahead to 3000ft on QNH advises ATC and request further instructions.

#### 15.16.4 VOR “ROB” RUNWAY 04

**Initial Approach:** at 25DME the Aircraft will be cleared to 3000ft to the “ROB” DVOR (113.8 KHz).

**Intermediate Approach:** after passing the DVOR descend to 1500ft on QNH. Fly 2 ½ minutes on 222m and make a procedure turn to the left, follow by a right turn to intercept 042 degrees radial inbound.

**Final Approach:** when established inbound on 042m continue descend to decision altitude, cross 4DME at 1225ft on QNH (1196ft) above threshold elevation.

**Obstacle Clearance Altitude:** 129ft on QNH (100ft) above threshold elevation; if the Glide Path is inoperative 204ft on QNH (175ft).

**Missed Approached:** climb straight ahead to 3000ft on QNH advises ATC and request further instructions.

Promulgate Information of the airport closure via AMSH or on ATS communication links.

## 16 APPROACH CHART INFORMATION

### 16.6 Instrument Landing System (ILS) RWY 04

The Obstacle Clearance Altitude (OCA), Decision Altitude/Height (DA/H) and Minimum Decision Altitude/Height (MDA/H) for the ILS / LOC approach RWY 04 Based on Minimum TAS of 135 KTS are:

- a) OCA 129 feet QNH (100 feet above threshold elevation);
- b) If Glide Path is inoperative, 204 feet QNH (175 feet above threshold elevation);
- c) Decision Altitude/Height (DA/H) 229 feet QNH (200 feet above threshold elevation);
- d) If Glide Slope (GS) out MDA/H 330 feet QNH (301 feet above threshold elevation);

### 16.7 VOR/DME RWY 04

The OCA and MDA/H for the VOR/DME approach RWY 04 Based on Minimum TAS of 135 KTS are:

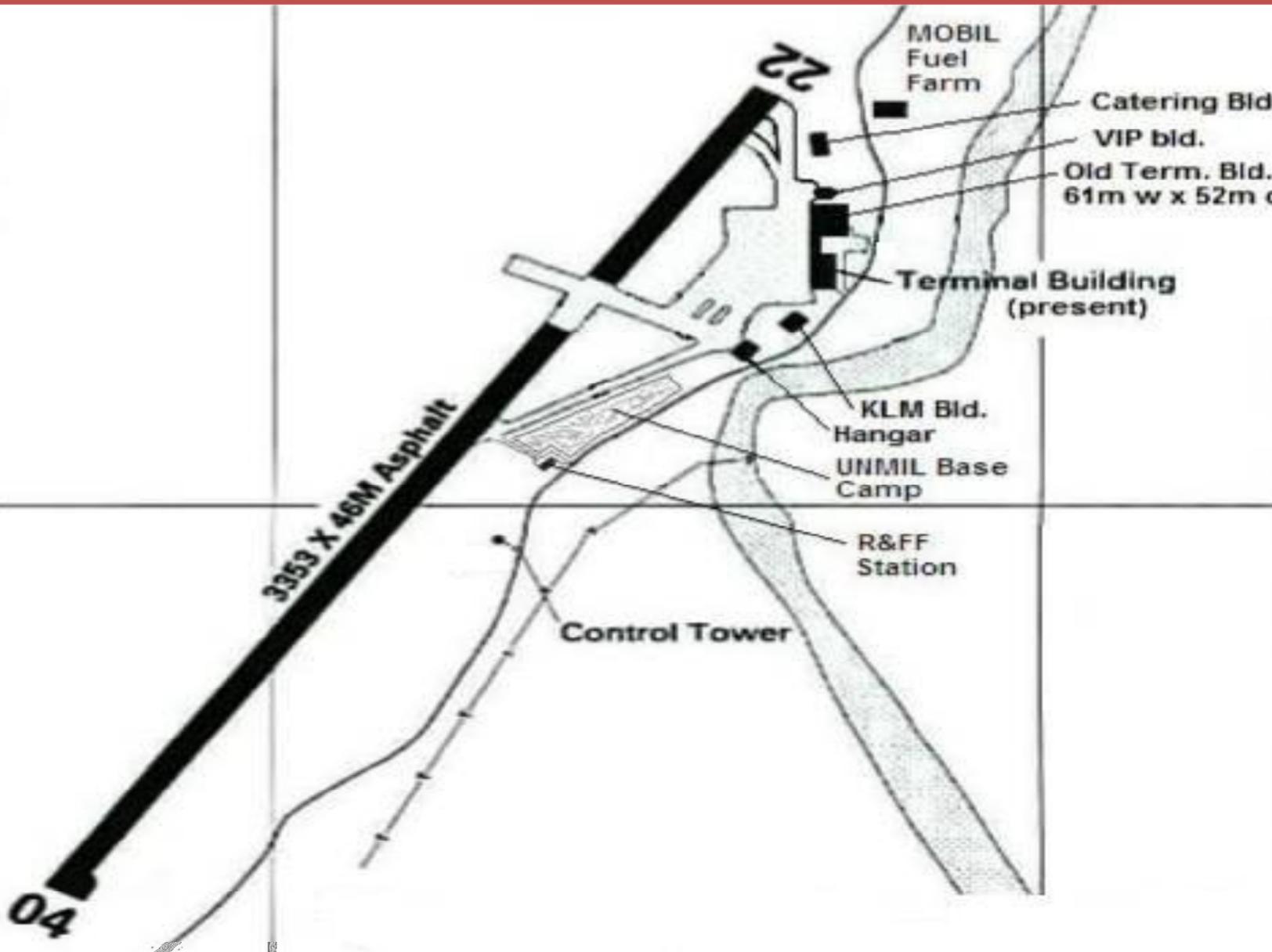
- a) OCA 450 feet QNH (419 feet above threshold elevation);
- b) Minimum Decision Altitude/Height (MDA/H) 450 feet QNH (419 feet above threshold elevation);

## **16.8 NDB “FOR”**

The DA/H and OCA for the NDB “FOR” approach RWY 04 Based on Minimum TAS of 135 KTS are:

- a) MDA/H 369 feet QNH (340 feet above threshold elevation);
- b) OCA 369 feet QNH (340 feet above threshold elevation).

## 17 AERODROME LAYOUT



## 18 AERODROME DATA AND MOVEMENT AREA DIMENSIONS

The Airport Reference Point for RIA is 06 14 25.60N 010 21 35.56W.

The Aerodrome Elevation is 31 feet and is located at TWY B RWY 22 intersection.

### 18.1 Runway 04

- PCN 50/F/B/Tu
- Length – 11000 Feet
- Width – 150 Feet
- Threshold Elevation – 29 Feet
- Landing Distance Available (LDA) – 11000 Feet
- Take Off Run Available (TORA) – 11000 Feet
- Surface – Asphalt
- Longitudinal Slope – 0.06 Degrees
- Shoulder width – 25 Feet
- All aircraft types can make 180-degree turn at the end of the Runway.
- True Bearing – 031° GEO
- Magnetic Variation – 11° West
- Magnetic Bearing – 042° M

### 18.2 Runway 22

- PCN 50/F/B/W/Tu
- Length – 11000 Feet
- Width – 150 Feet
- Threshold Elevation – 25 Feet
- Landing Distance Available (LDA) – 9800 Feet
- Displaced Threshold – 1200 Feet
- Take off Run Available (TORA) – 11000 Feet
- Surface – Asphalt
- Longitudinal Slope – 0.06 Degrees
- Displaced Threshold Elevation – 26 Feet
- Shoulder width – 25 Feet
- All aircraft types can make 180-degree turn at the end of the Runway.
- True Bearing – 211° GEO
- Magnetic Variation – 11° West
- Magnetic Bearing – 222° M

### 18.3 Taxiway Alpha (A)

- Length - 1200 Feet
- Width - 75 Feet

- Distance from Threshold Runway 04 - 10846 Feet

### **18.4 Taxiway Alpha (A1)**

- Length - 1500 Feet
- Width - 75 Feet
- Distance from Threshold Runway 22 - 154 Feet
- Distance from Threshold Runway 04 - 10846 Feet

### **18.5 Taxiway Bravo (B)**

- Length - 1900 Feet
- Width - 75 Feet
- Distance from Threshold Runway 22 - 2700 Feet
- Distance from Threshold Runway 04 - 8300 Feet

### **18.6 Taxiway Charlie (C)**

- Closed
- Length – 2000 Feet
- Width – 60 Feet
- Distance from Threshold Runway 22 – 4720 Feet
- Distance from Threshold Runway 04 – 6280 Feet
- High Speed Taxiway Leave Runway 04 at 035 degrees angle.

### **18.7 Apron**

- Asphalt – 57,000 m<sup>2</sup>
- Concrete – 28,000 m<sup>2</sup>

## **19 AERODROME INSPECTION**

### **19.1 Introduction**

The air traffic control unit is responsible to conduct aerodrome inspections. However, special arrangements may be made for these duties to be delegated to the aeronautical information service (AIS).

Aerodrome surface and lighting inspections are carried out to ensure that:

- a. The air traffic control unit becomes aware of any unserviceabilities or obstructions that may affect the use of the aerodrome and are able to supply pilot with accurate essential aerodrome information.

- b. Unserviceabilities or obstructions that are observed may receive attention.

## 19.2 Aerodrome surface Inspections

At least one regular inspection should be made daily. At aerodrome which is opened 24 hour this should be as soon as practicable before the first arrival or departure. At aerodromes that operate from sunrise-sunset, inspection should take place before flying commences. A further inspection should be conducted any time during the day when necessary.

Additional surface inspection should be made:

- a. At cessation of work on the maneuvering area;
- b. Following an aircraft accident;
- c. Following an abandoned take-off by a turbine engine aircraft due to engine malfunction or by any aircraft due to burst tires;
- d. Following a heavy shower as frequently as whether condition warrant;
- e. When considered necessary by the air traffic control unit.

Aerodrome inspections should cover the runway-in-use, together with the associated prepared stripes, clearways, stop ways and appropriate taxi ways.

The person carrying out the inspection is not normally required to proceed outside the aerodrome boundary. He should carry out his inspection from a vehicle driven slowly over the area to be inspected, halting as necessary when individual items require closer inspection. He should report his findings.

### 19.2.1 Normal conditions

A check should be made to ascertain whether or not:

- a. The runways, stop ways, clear ways, taxi ways, and holding areas are free from obstructions, collection of loose stones, over grown grass, standing water, etc;
- b. Temporary obstruction that exist on, or adjacent to, the run ways or taxi ways are properly marked or lighted;
- c. Broken surface or depression on the run ways and taxi ways
- d. Obliteration of runways and taxiways markings,
- e. Runways indicator boards, traffic sounds, boundaries markers, etc are serviceable and in position.

A note should be taken of the exact position of the obstruction or unserviceability

observed. Any of the above conditions that are encountered should be reported to LCAA aerodrome engineer and the airport compliance.

Note: “Temporary Obstruction” means anything which will impede the normal movement of aircraft or infringe current aerodrome obstruction criteria.

### **19.3 Aerodrome Lighting Inspections**

The aerodrome lighting should be inspected before night flying commences. The inspection should include only those lights which can easily be seen from the aerodrome, should cover the following:

- a. The serviceability of runway, taxiway and obstruction lighting, traffic lights, beacons and the approach lighting
- b. A check that lightens is not obscured by long grass or other obstructions
- c. Precision Approach Path Indicators (PAPI) are accurately setup and serviceable

### **19.4 Reporting Action**

Unserviceabilities or obstructions observed during aerodrome surface or lighting inspections should be recorded on the appropriate aerodrome inspection form, log and the information disseminated to the following:

- a. LCAA Aerodrome Engineer
- b. Airport Compliance
- c. Base Support Manager

When urgent action is necessary, i.e., for marking, lighting or immediate repair, details should be passed to the responsible section.

## **20 NOTIFICATION OF RESCUE COORDINATION CENTRES**

Without prejudice to any other circumstances that may render such notification advisable, air traffic services units shall, notify rescue coordination centres immediately an aircraft is considered to be in a state of emergency in accordance with the following:

### **20.1 Uncertainty phase when:**

- 1) no communication has been received from an aircraft within a period of thirty minutes after the time a communication should have been received, or from the time an unsuccessful attempt to establish communication with such aircraft was first made, whichever is the earlier, or when

- 2) an aircraft fails to arrive within thirty minutes of the estimated time of arrival last notified to or estimated by air traffic services units, whichever is the later, except when no doubt exists as to the safety of the aircraft and its occupants.

## **20.2 Alert phase when:**

- 1) following the uncertainty phase, subsequent attempts to establish communication with the aircraft or inquiries to other relevant sources have failed to reveal any news of the aircraft, or when
- 2) an aircraft has been cleared to land and fails to land within five minutes of the estimated time of landing and communication has not been re-established with the aircraft, or when
- 3) information has been received which indicates that the operating efficiency of the aircraft has been impaired, but not to the extent that a forced landing is likely, except when evidence exists that would allay apprehension as to the safety of the aircraft and its occupants, or when
- 4) an aircraft is known or believed to be the subject of unlawful interference.

## **20.3 Distress phase when:**

- 1) following the alert phase, further unsuccessful attempts to establish communication with the aircraft and more widespread unsuccessful inquiries point to the probability that the aircraft is in distress, or when
- 2) the fuel on board is considered to be exhausted, or to be insufficient to enable the aircraft to reach safety, or when
- 3) information is received which indicates that the operating efficiency of the aircraft has been impaired to the extent that a forced landing is likely, or when
- 4) information is received or it is reasonably certain that the aircraft is about to make or has made a forced landing,

except when there is reasonable certainty that the aircraft and its occupants are not threatened by grave and imminent danger and do not require immediate assistance.

## **21 EMERGENCIES**

### **21.1 General**

This section contains unique and regulatory response planning details that apply to the following aircraft emergencies classification identified at RIA. It addresses the essential operational actions that must be accomplished by ATC to facilitate the successful completion of a particular response function to the types of aircraft emergencies listed below:

- A. Aircraft incidents and accidents.
  - I. Alert I (Local Standby)
  - II. Alert II (Full Emergency)
  - III. Alert III (Aircraft Accident)
- B. Aircraft Bomb threat.
- C. Structural fires.
- D. Hazardous materials, including Radiological incidents.
- E. Unlawful interference with operations.
- F. Failure of power for movement area lighting.
- G. Weather

### **21.2 Aircraft Incidents and Accidents**

#### **21.2.1 Aircraft Accident**

Any occurrence associated with the operation of an aircraft that takes place between the time a person boards the aircraft with the intention of flight and the time such person has disembarked, in which a person suffers death or serious injury as a result of the occurrence or in which the aircraft receives substantial damage.

#### **21.2.2 Aircraft Incident**

Any occurrence associated with the operation of an aircraft that is not considered an “aircraft accident.”

### **21.3 Alert I (Local Standby)**

Alert I start when an aircraft is known or suspected to have an operational defect that should not normally cause serious difficulty in achieving a safe landing. This is notification only. No response is required. All units involved will be manned and will standby in quarters.

### **21.3.1 Action to be taken by ATC**

- A. Alert Rescue & Fire Fighting Services (RFFS) and inform them of the following:
  - i. Aircraft call sign
  - ii. Type of aircraft
  - iii. Fuel on board
  - iv. Persons on board
  - v. Nature of emergency
  - vi. Runway in use
  - vii. Estimated time of landing
  - viii. Any dangerous goods on board, including quantity and location, if known
  
- B. ATC shall also notify the following:
  - i. Director General (LCAA)
  - ii. General Manager
  - iii. Aeronautical Information Service (AIS)
  - iv. Liberia Civil Aviation Authority (LCAA), Flight Safety Division

### **21.4 Alert II (Full Emergency)**

Alert II is initiated when an aircraft is known or suspected to have an operational defect that affects normal flight operations to the extent that there is danger of an accident. All units respond to pre-designated positions.

#### **21.4.1 Action to be taken by ATC**

- A. Sound the crash alarm.
- B. Notify Rescue & Fire Fighting Services (RFFS) on the ground frequency 121.9 MHz of the following:
  - i. Aircraft call sign
  - ii. Type of aircraft
  - iii. Fuel on board
  - iv. Persons on board
  - v. Nature of emergency
  - vi. Runway in use
  - vii. Estimated time of landing
  - viii. Any dangerous goods on board, including quantity and location, if known

## 21.5 Alert III (Aircraft Accident)

Alert III is initiated when an aircraft incident/accident has occurred on or in the vicinity of the airport. The response area for RIA is 3 nautical miles radius from the aerodrome reference point.

### 21.5.1 Action to be taken by ATC

- A. Immediately sound the crash alarm.
- B. Notify Rescue & Fire fighting Services (RFFS) on the ground frequency 121.9 MHz of the following:
  - i. Nature of accident/emergency
  - ii. Location of the accident/incident site
  - iii. Grid map reference
  - iv. Time of Accident/incident
  - v. Type of aircraft
  - vi. Number of people on board
  - vii. Fuel on board
  - viii. Aircraft operator; and
  - ix. Any dangerous goods on board, including quantity and location, if known
- C. Issue appropriate NOTAMs per direction of General Manager/airport authority.
- D. Control aircraft and ground vehicle operations on the airport in support of the emergency response, if the airport stays open. If necessary, close the affected runway and minimize vehicle traffic to prevent disturbance of accident investigation and rescue activities
- E. Control airspace in the vicinity of the accident to prevent other aircraft from interfering with emergency response activities.
- F. Obtain actual weather report from Meteorological (MET) Services
- G. Notify the following:
  - i. Director General (LCAA)
  - ii. Notify Airport Operations and Compliance via the Airport Communications Center on ground frequency 121.9 MHz
  - iii. Aeronautical Information Service (AIS)
  - iv. Liberia Civil Aviation Authority (LCAA), Flight Safety Division

## 21.6 Bomb Threat – Aircraft

A bomb threat is a situation that occurs when an aircraft may be under threat from an explosive device that could cause severe damage to lives and property.

The following procedures shall apply if a threat is received indicating that a bomb or other explosive device has been placed on board a known aircraft:

### **21.6.1 Action to be taken by ATC**

- A. Advise the flight crew of the threat without delay.
- B. Ascertain the intentions of the flight crew and advise other ATC units which may be concerned with the flight
- C. Handle the aircraft in the most expeditious manner while ensuring, as much as possible, that the safety of other aircraft and that of personnel and ground installations are not put at risk.
- D. Inform the airport authority/general manager.
- E. Instruct aircraft in flight to divert to a requested destination without delay.
- F. Instruct aircraft on the ground to stay away from other aircraft and installations as much as possible, and if appropriate to vacate the runway. The aircraft should be instructed to taxi to a designated or isolated parking lot.
- G. Provide relevant information and directions to aircraft operators.
- H. Provide necessary air and ground traffic control support for emergency response activities.

***Note:** Air Traffic Control Services shall not provide any advice or suggestion concerning action to be taken by the flight crew in relation to an explosive device.*

## **21.7 Structural Fires**

Structural fires are fires occurring at or in airport buildings such as terminals and hangars.

### **21.7.1 Action to be taken by ATC**

Upon receiving the information about the nature and location of the fire, ATC shall:

- A. Notify Airport Operations and Compliance via the Airport Communications Center on ground frequency 121.9 MHz
- B. Notify RFFS.
- C. Provide information and directions to aircraft operators as appropriate.
- D. Issue appropriate NOTAM per request of General Manager

## **21.8 Hazardous Materials**

Hazardous Materials are defined as any substance or material that, when involved in an accident and released in sufficient quantities, poses a risk to people's health, safety, and/or property. These substances and materials include:

- A. Explosives;
- B. Radioactive materials;

- C. Flammable liquids or solids;
- D. Combustible liquids or solids;
- E. Poisons;
- F. Oxidizers;
- G. Toxins; and
- H. Corrosive materials.

*Note: For this LATCI, the term hazardous material includes those substances defined as “dangerous goods” as presented in the related ICAO documents, including the Technical Instructions and the International Air Transport Association (IATA) Dangerous Goods Regulations.*

### **21.8.1 Action to be taken by ATC**

- A. Provide relevant information and directions to aircraft operators.
- B. Provide necessary air and ground traffic control support for emergency response activities.
- C. Make required notifications, including NOTAMs, as needed.

## **21.9 Unlawful Interference of Aircraft (Sabotage, Hijack, etc)**

An unlawful interference is a situation where an individual (s) unlawfully interfere with aircraft operations during or prior to movement and illegally attempts to take charge of the course of action of the aircraft, crew or passengers (hijacking). The pilot shall immediately inform ATC.

### **21.9.1 Action to be taken by ATC**

- A. Promptly attend to request by the flight crew and immediately inform the airport authority/General Manager.
- B. Transmit and continue to transmit information pertinent to the safe conduct of the flight.
- C. Monitor and plot the progress of the flight with the means available.
- D. Notify the operator or its designated representatives.
- E. Notify Airport Security/Police
- F. Provide relevant information and directions to aircraft operators.
- G. Provide necessary air and ground traffic control support for emergency response activities.
- H. Issue a NOTAM per the authority of General Manager or his designate.

*Note: It is assumed that the designated security authority and/or the operator concerned will in turn notify other parties concerned in accordance with pre-established procedures.*

*Note: An aircraft known or believed to be subject of unlawful interference or which for other reasons needs isolation from the normal aerodrome activities shall be cleared to the designated isolated parking lot identified by the Airport Authority.*

## **21.10 Failure of power for movement area lighting**

Movement Area Lighting Power Failure exists when the primary power supply from the Firestone Rubber Company and RIA 250KVA backup generators in Power House 1 which supplies power for the Control tower, MET and RFFS departments, runway lighting system and navigational aids breakdown or the generator Automatic Transfer Switch (ATS) fails to operate.

### **21.10.1 Action to be taken by ATC**

- A. Notify the Electrical Department, the Airport Operations and Compliance via the Airport Communications Center on ground frequency 121.9 MHz
- B. If RIA Airport Operations and Compliance is unavailable, immediate inform the CNS Department LCAA.

## **21.11 Weather Standby**

Weather standby: a state of readiness by RFFS during departure and landing of aircraft when the weather is such that landing and departure become difficult to be observed by the Control Tower. This happens in any case when the visibility is less than 2,500 meters and/or the ceiling is less than 500 feet.

### **21.11.1 Action to be taken by ATC**

ATC shall request RFFS for weather standby and advice on the following:

- A. Type of aircraft.
- B. Fuel on board.
- C. Persons on board

ATC shall also advise the following:

- A. General Manager
- B. Briefing (AIS), and
- C. MET office

***Note:** If the aircraft diverts to a different station, ATC shall advise RFFS to terminate the standby.*

## 21.12 Movement Standby

Movement standby is a state of readiness by RFFS that must exist during aircraft engine startup and landing.

### 21.12.1 Action to be taken by ATC

ATC shall alert RFFS by radio or telephone and advice on the following:

- A. Aircraft type and category.
- B. Arrival /departure
- C. Runway in use

## 21.13 Local Standby

Local standby is a situation in which an aircraft approaching the airport is known or is suspected to have developed some defect but the trouble is not such that it would normally involve any serious difficulty in effecting a safe landing.

### 21.13.1 Action to be taken by ATC

Alert Rescue & Fire Fighting Services (RFFS) of the following:

- ix. Aircraft and call sign
- x. Type of aircraft
- xi. Fuel on board
- xii. Persons on board
- xiii. Nature of emergency
- xiv. Runway in use
- xv. Estimated time of landing
- xvi. Any dangerous goods on board, including quantity and location, if known

## 21.14 Overdue Aircraft

Overdue action should not be considered in isolation and the emergency actions described in other chapters should be applied if they are appropriate. For example, if a radio equipped aircraft fails to make an expected report continued attempts should be made to reestablish communication while at the same time commencing overdue action.

Overdue action is not related solely to the filing of a flight plan. If, at any stage of a flight the pilot has made his intentions clear and subsequently does not arrive or report when expected, controllers should seriously consider taking overdue action.

Overdue action described in this chapter must be commenced not later than the times shown in the following paragraphs. The decision to take overdue action before these times is left to the discretion of the controller. The following points may assist in making the decision:

- A. Types of aircraft - Strict adherence to the flight plan cannot always be expected of a non-radio light aircraft.
- B. Route - The need for prompt action if the route is over sparsely populated areas, mountainous country, and long stretches of water, etc.
- C. Weather - The pilot of non-radio aircraft might well be expected to extend his flight time by deviating from his planned route to avoid bad weather. Where no additional hazards exist, sufficient time for a deviation should be allowed.

#### **21.14.1 Action to be taken by ATC**

##### **A. Non-Radio Aircraft - Preliminary Action**

The following preliminary action for non-radio aircraft shall be commenced no later than 30 minutes after ETA:

- I. Check flight plan for obvious errors in compilation or transmission. Consult operating company or representative if available.
- II. Confirm ATD with aerodrome of departure using the quickest means of communication. Inform the ACC supervisor of the situation and in coordination with him:
  - 1. Check with alternate aerodromes
  - 2. Send RQS message
  - 3. Check with any likely aerodromes on and adjacent to the proposed route of the aircraft

##### **B. Non-Radio Aircraft - Full Overdue Action**

The following overdue action for a non-radio aircraft shall be commenced not later than one hour after ETA:

- I. Notify the parent ACC that the aircraft is now fully overdue and state the action already taken;
- II. In consultation with the ACC supervisor, continue endeavors to trace the aircraft, e.g. Notify local police or any other appropriate bodies to be on the lookout for the aircraft if it is assumed that it has made a forced landing in a particular area.

### **C. Radio Equipped Aircraft - Preliminary Action**

If an aircraft fails to make a position report when expected, the following preliminary action shall be commenced not later than the estimated time for the reporting point plus 10 minutes:

- III. Advise the ACC supervisor that the aircraft is overdue.
- IV. Confirm ATD from departure aerodrome by quickest possible means
- V. Ensure that an RQS message is sent

### **D. Radio Equipped Aircraft—Full Overdue Action**

If after the action above no news is received, or one hour has elapsed since a scheduled position report should have been received, or the fuel carried by the aircraft is considered to be exhausted, whichever is the sooner, the controller at the destination aerodrome shall inform the ACC supervisor that the aircraft is fully overdue.

### **E. Non-Appearance of Aircraft**

If an aircraft which has been cleared to commence approach, after completing any necessary holding, fails to land within 5 minutes of the estimated time of landing and communication cannot be established, the following action shall be taken:

- I. Request other aircraft flying in the vicinity of the aircraft's last known position to be on the lookout;
- II. Exercise caution when authorizing the movement of aerodrome traffic;
- III. Alert the emergency services in accordance with local emergency procedures;
- IV. Check with other aerodromes in vicinity;
- V. If necessary, send RQS message;
- VI. Advise the ACC supervisor.

## **21.15 Radio Failure**

Radio failure procedure should not be considered in isolation and emergency action described in other chapters should be applied if they are appropriate. For example, if an aircraft fails to make a report when expected, overdue action may have to be taken at the same time.

Radio failure procedure shall be adopted when:

- A. Communication cannot be maintained with an aircraft on any flight which is being provided with air traffic control advisory service,
- B. Communication cannot be established with an aircraft operating, or intending to operate, on an IFR flight plan within controlled or advisory airspace.

The following procedures are based on the assumption that the pilot will comply with the current procedures for radio failure.

### **21.15.1 Action to be taken by ATC**

After attempts to establish or re-establish communication have failed controllers are to carry out the following standard radio failure procedure:

- A. Maintain separation between the radio failure aircraft and other known traffic.
- B. Give pertinent information about the movement of the radio failure aircraft to other aircraft in the presumed vicinity
- C. Ask aircraft in the presumed vicinity to establish communication with the radio failure aircraft and relay messages.

Transmit, on the appropriate frequencies:

- A. Level, route and EAT (or ETA) to which the radio failure aircraft is assumed to be adhering; and
- B. The weather condition at the destination aerodrome, a suitable alternate and, if practicable, in areas suitable for a descent through clouds.

When in consultation with the operator, instructions to divert have been transmitted to the radio failure aircraft, inform the alternate aerodrome and request that they attempt to establish communication.

## **22 SEARCH AND RESCUE**

### **22.1 Search and Rescue Action**

The procedure for initiating search and rescue action is in accordance with Airport Operation Manual (AOM). The responsibility for initiating action is normally that of the Air Traffic Services Unit (ATSU) under whose jurisdiction the aircraft develops the need for search and rescue or the ATSU to which the responsibility is transferred.

The duty air traffic control officer (DATCO) shall immediately:

- A. Alert the emergency services in accordance with emergency orders if they become aware that an aircraft is in need of search and rescue aid with the radius of action; and shall provide those services with the fullest available information.
- B. Notify the senior air traffic control officer (SATCO).
- C. Notify the senior supervisor.
- D. Notify the operator of the aircraft or its designated representative.

The SATCO is responsible for notifying the rescue coordination center (RCC) of aircraft emergencies that require search and rescue aid.

The following local services are available for search and rescue:

- A. Ministry of Defence
- B. Bureau of Maritime Affairs
- C. Liberia National Police

The senior supervisor will up-date the DATCO and, if necessary, the controller at the RCC during search and rescue operations.

## **23 COORDINATION**

The coordination and transfer of control of a flight between Roberts (ACC, APC and ADC) shall be effected as follows:

### **23.1 Coordination between the Unit Providing ACC and APC**

#### **23.1.1 Liaison with Area Control (ACC)**

Approach Control shall liaise with ACC as follows:

- To obtain ATC Clearance for all IFR flights wishing to operate within the RFIR/TMA/CTR prior to the departure of such aircraft;
- Advised of departure times together with flight details and other information as possible;
- Runway in use and type of instrument approach procedure for all arriving aircraft;
- Lowest available flight level;
- Revise expected approach time issued;
- Inform ACC of any aircraft in the holding pattern.

#### **23.1.2 Transfer of Control to Area Control (ACC)**

Departing aircraft will be released to ACC by APC as follows:

- At or before passing FL100 climbing,
- When the departing aircraft is cleared of all arriving aircraft or traffic under the control of APC, or
- As instructed by the ACC and APC as agreed.

#### **23.1.3 Liaison with Approach Control (APC)**

Area Control shall liaise with APC as follows:

- Estimated time of arrival, aircraft Call sign, type, point of departure, level, time/point to be released;
- Inbound clearance for arriving aircraft together with expected approach time (EAT);
- Any other pertinent information.

#### **23.1.4 Transfer of Control to Approach Control (APC)**

Arriving aircraft will be released to APC by ACC as follows:

- At or before passing FL100 descending,
- When the arriving aircraft is cleared of the departing aircraft under the control of ACC, or
- As instructed by the ACC and APC as agreed.

#### **23.1.5 Communications**

Communications for coordination between ROB ACC and ROB APC shall be effected by means of using ATS D/S telephone circuit. The following alternative means shall be used in the order of priority:

- a) IDD telephone
- b) HF/RTT
- c) Relay through other ATS units
- d) Relay through other aircraft
- e) AMSH

#### **23.1.6 Division of Control**

ACC shall maintain control of all departing aircraft released by APC as follows:

- At or before passing FL100 climbing,
- When the departing aircraft is cleared of all traffic under APC; whichever is earlier.

APC may issue ATC Clearances to any aircraft released by ACC as follows:

- At the TMA,
- Passing FL100 descending or above if traffic conditions permit,

#### **23.1.7 Exchange of Movement Data**

- I. The unit providing ROB ACC shall keep ROB APC promptly advised of pertinent data on controlled traffic such as:

- A. A/C Callsign, type and point of departure of arriving aircraft;
  - B. Estimated time and proposed level of arriving aircraft;
  - C. Requested type of instrument approach procedure;
  - D. Expected approach time issued;
  - E. Released point, time and condition, if necessary; and
  - F. Any other pertinent information
- II. The unit providing ROB APC shall keep ROB ACC promptly advised of pertinent data on controlled traffic such as:
- A. Flight plan details;
  - B. Departure time;
  - C. Runway in use and expected type of instrument approach procedure;
  - D. Lowest vacant level;
  - E. Missed approach;
  - F. All available information relating to overdue aircraft;
  - G. Landing time; and
  - H. Any other pertinent information

## **23.2 Coordination between the Unit Providing APC and ADC**

### **23.2.1 Liaison with Approach Control (APC)**

Aerodrome Control shall liaise with APC as follows:

- Pass all requests for start-up clearance to APC and relay clearance or other instructions to aircraft.
- Advise of the active runway.
- Re-clearance must be requested from APC should a departing aircraft request take-off in a direction other than the runway in use after receiving its ATC Clearance.
- All departures time, except that only the initial departure time of aircraft on circuit detail of direction/position.
- Un-serviceability of equipment, facility or anything on the manoeuvring area which may affect the safety of aircraft operation.
- When an emergency standby is required; as soon as vehicles are in position.
- When requests are received for circuit training in VMC and upon completion of such training.
- Any request for vehicles operation on or crossing the runway in IMC.
- When landing is assured of an arriving aircraft which have been transferred as number 1 report visual or landed and cleared the runway.

### 23.2.2 Transfer of Control to Approach Control (APC)

Departing aircraft will be released to APC by ADC as follows:

#### III. In Visual Meteorological Conditions (VMC)

- IFR aircraft after passing 3000 feet or at least 3 minutes after airborne; whichever is earlier.
- VFR aircraft when clear of circuit.

#### IV. In Instrument Meteorological Conditions (IMC)

- At the holding point, when APC is handling traffic on the runway
- Immediately after airborne.
- Before entering the runway-in-use.

### 23.2.3 Liaison with Aerodrome Control (ADC)/Tower

Approach Control shall liaise with the Tower:

- To advise where transfer of control will take place.
- Advise the Tower of the order of arriving traffic.
- In IMC, Inform Tower when the arriving aircraft commences final approach. An acknowledgement of this will indicate that the runway is clear. When no acknowledgement is received from the Tower, or if the runway is not clear, instructions to go around shall be passed to the aircraft in sufficient time to allow a safe procedure to be carried out.
- In VMC, when aerodrome control is handling runway and circuit traffic, notify Tower as each arriving flight leaves the Roberts DVOR or FOR Beacon to commence an instrument approach.
- Notify Tower of aircraft making straight in approach.
- Before approving request from arriving aircraft to use a runway other than the active runway.
- Ensure that ATC Clearances are passed to the Tower controller on time.

### 23.2.4 Transfer of Control to Aerodrome Control (ADC)/ Tower

Arriving aircraft will be released to Tower by APC as follows:

#### I. In Visual Meteorological Conditions (VMC)

- IFR traffic executing instrument approach procedure, when ROB/FOR outbound leaving 3000 feet. (Conditional)
- IFR traffic executing 10 NM Arc approach procedure, when crossing Radial 151 or 301 depending on the direction of the flight, leaving 3000 feet.

- IFR traffic executing straight in approach procedure, when 10 NM and established on the Localizer. (Conditional)
  - IFR traffic cleared to execute visual approach, with the field in sight leaving 3000 feet and within 25 NM from Roberts. (Conditional)
  - VFR traffic cleared to execute visual approach, with the field in sight leaving 3000 feet. (Conditional)
- II. In Instrument Meteorological Conditions (IMC)
- Arriving aircraft executing instrument approach procedure at Roberts; when landing is assured, or have landed and cleared the runway-in-use.

### 23.2.5 Communications

Communication for coordination between ROB APC and ROB ADC shall be effected by means of direct speech.

### 23.2.6 Division of Control

The unit providing ROB APC shall retain control of arriving aircraft until such aircraft have been cleared to ROB ADC and are in communication with the aerodrome control tower when:

1. The aircraft has passed 3000 feet;
2. The aircraft has reported overhead outbound the facility in use;
3. Crossing radial 301/151 at 10 DME when executing the 10 DME are approach;
4. The aircraft has reported field in sight; (Conditional)
5. 10 DME and established on the localizer when executing straight in approach;
6. In instrument meteorological conditions (IMC) after the aircraft has landed and vacated the runway.

The unit providing ROB ADC shall maintain control of all departing aircraft until such aircraft is released to ROB APC, when:

I. During VMC

- A. prior to the aircraft leaving the vicinity of the aerodrome;
- B. Passing 3000 feet or at least three (3) minutes after airborne; Which ever is earlier.

II. During IMC

- A. Prior to the aircraft entering the runway-in-use for take-off;

B. Immediately after airborne.

The unit providing ROB ADC shall obtain approval from the unit providing ROB APC for authorization of special VFR flights.

### **23.2.7 Exchange of Movement and Control Data**

ROB ADC shall keep ROB APC promptly advised of pertinent data on relevant controlled aircraft such as:

- A. Flight plan details;
- B. Actual time of arrival and departure;
- C. Person on board and fuel endurance;
- D. Information when in communication with the first aircraft on the Approach and sighted by the ADC Controller;
- E. Information on overdue or unreported aircraft;
- F. Landing time;
- G. Information on essential local traffic;
- H. Start-up clearance request;
- I. ATC Clearance request;
- J. Departure or delay; and
- K. Any other pertinent information

ROB APC shall keep ROB ADC promptly advised of pertinent data on relevant controlled aircraft such as:

- A. Callsign, type and point of departure of arriving aircraft;
- B. Estimated time of arrival;
- C. Person on board and remaining fuel endurance
- D. Released/contact point/time;
- E. Order in which arriving aircraft are released;
- F. Any other pertinent information

## **23.3 Coordination between ROB APC/ADC and SPRIGGS Control Tower**

### **23.3.1 Liaison with SPRIGGS Control Tower**

Approach Control shall liaise with SPRIGGS Tower:

- Arriving aircraft Call sign, type, point of departure, level and estimated time of arrival;
- Inbound clearance for arriving aircraft;
- Released point, level or time and condition;
- Any other pertinent information.

### 23.3.2 Transfer of Control to SPRIGGS Tower

Arriving aircraft will be released to SPRIGGS by APC/ADC as follows:

- I. In Visual Meteorological Conditions (VMC)/Instrument Meteorological Conditions (IMC)
  - Leaving 3000 feet SM Beacon inbound leaving with the runway in sight and landing is assured;
  - IFR traffic request to execute visual approach; with the field in sight leaving 3000 feet;
  - VFR traffic cleared to execute visual approach; with SPRIGGS in sight leaving 3000 feet;
  - VFR traffic before entering SPRIGGS CTR.

### 23.3.3 Liaison with ROB APC/ADC

SPRIGGS Tower shall liaise with ROB APC/ADC as follows:

- Flight plan details;
- To obtain ATC Clearance for all IFR flights wishing to operate within the RFIR/TMA/CTR prior to the departure of such aircraft;
- Advised of departure times together with estimates for reporting/transfer points and others as soon as possible;
- Runway in use;
- Missed approach
- Landing time

### 23.3.4 Transfer of Control to ROB APC/ADC

Departing aircraft will be released to APC/ADC by SPRIGGS as follows:

- I. In Visual Meteorological Conditions (VMC)
  - Departing IFR aircraft after passing 3000 feet or at least 3 minutes after airborne; whichever is earlier,
  - Departing VFR aircraft leaving SPRIGGS CTR.
- II. In Instrument Meteorological Conditions (IMC)
  - Immediately after airborne.

### 23.3.5 Communications

Communication for coordination between ROB APC and SPRIGGS control tower shall be effected by means of:

- A. Motorola
- B. HF Radio
- C. Intercom-wireless
- D. Cell phone

### 23.3.6 Division of control

#### I. IFR Arrival

ROB APC shall release on arriving IFR aircraft to SPRIGGS control tower when:

- 1. In VMC
  - A. The aircraft report SPRIGGS in sight and leaving 3000 feet
  - B. The aircraft report beacon outbound.
  - C. The aircraft is at or above the transitional altitude VMC and there is no Conflicting or reported traffic below to endanger safety;
- 2. In IMC
  - A. The aircraft reports SPRIGGS in sight and there is reasonable assurance that a visual landing can be accomplished;
  - B. SPRIGGS Tower reports the aircraft in sight

#### II. IFR Departure:

SPRIGGS Tower shall transfer all IFR departing aircraft to ROB APC:

- 1. During VMC
  - I. When the aircraft has departed leaving the vicinity or passing 3000 ft.
  - II. Immediately after airborne based on traffic conditions
- 2. During IMC
  - I. Immediately after airborne

#### III. VFR Arrival

Roberts Tower shall release all departing VFR flights to SPRIGGS tower when:

- A. The aircraft has reported leaving Roberts CTR;
- B. Requested by SPRIGGS tower prior to the aircraft entering SPRIGGS CTR.

#### **IV. VFR Departure**

SPRIGGS tower shall transfer all departing VFR flights to ROB tower when:

- A. The aircraft has reported leaving SPRIGGS CTR;
- B. Requested by ROB tower prior to the aircraft leaving SPRIGGS CTR.

#### **V. Enroute Aircraft**

ROB ADC shall maintain control of all VFR aircraft transiting the Roberts CTR or outside the CTR enroute to SPRIGGS until.

- A. The aircraft has reported leaving ROB CTR
- B. 10NM inbound to SPRIGGS when the aircraft is outside ROB CTR.

### **23.3.7 Exchange of Movement and Control Data**

- I. SPRIGGS tower shall keep ROB APC promptly advised of pertinent data on our controlled traffic such as:
  - A. Flight plan details
  - B. Departure time of departing aircraft
  - C. All available information relating to overdue unreported aircraft.
  - D. Missed approaches;
  - E. Landing time
  - F. Any other pertinent information
- II. ROB APC shall keep SPRIGGS tower promptly advised of pertinent data on controlled traffic such as:
  - A. Callsign, type and point of departure and of arrival;
  - B. Person on board and remaining fuel endurance
  - C. Expected approach time issued;
  - D. Released point, time and condition;
  - E. Any other pertinent information.

## **23.4 COORDINATION BETWEEN ROB APC/ADC AND AIS**

### **23.4.1 Communication**

Communication between the APC/ADC and AIS shall be carried out by means of:

- A. Intercom;
- B. VHF radio;
- C. AMHS
- D. Mobile phone.

### **23.4.2 Exchange of Movement and Control Data**

- I. APC/ADC shall immediately advise the AIS Office of the following;
  - A. Estimated Time of Arrival (ETA) and Actual Time of Arrival (ATA)
  - B. Actual Time Departure (ATD), person on board (POB) and Endurance (END)
  - C. Missed approach;
  - D. Diversion
  - E. closure of the airport; and
  - F. Any other relevant information.
  
- II. The AIS Office shall keep ATMD currently advised of the following
  - A. Flight plan data;
  - B. Transmit arrival, departure, delay, cancellation messages;
  - C. Inform tower on the rescheduling of flight;
  - D. NOTAM;
  - E. Inform tower on aircraft parking request from Aircraft Maintenance; and
  - F. Any other relevant information

## **23.5 COORDINATION BETWEEN ROB APC/ADC AND MET**

### **23.5.1 Communication**

Communication between the Met Department and APC/ADC shall be carried out by means of:

- A. Intercom;
- B. VHF radio;
- C. AMSH
- D. Mobile phone.

### **23.5.2 Exchange of Movement and Control Data**

- I. The Met Department shall keep ATMD currently advised of the following
  - A. Half hourly METAR;
  - B. SPECI when necessary;
  - C. TAFOR; and
  - D. Any other weather information that may affect the smooth operation of an aircraft.
  
- II. APC/ADC shall immediately advise the Met department of the following;
  - A. ETA
  - B. Pilot reports or MET
  - C. Phenomena (AIREP);
  - D. Missed approach due to MET condition;
  - E. Diversion due to MET condition; and
  - F. Any other relevant information that affect the aircraft due to weather.

## **23.6 COORDINATION BETWEEN ROB APC/ADC AND RFFS**

### **23.6.1 Communication**

Communication between RFFS and the APC/ADC shall be carried out by means of:

- 1) Intercom;
- 2) VHF radio;
- 3) Mobile phone;

### **23.6.2 Exchange of Movement Control Data**

ADC shall keep RFFS promptly advised when any of the following condition exists:

- A. ETAs of all arrivals
- B. Alert movement of all arrivals and departing aircrafts
- C. Weather standby;
- D. Local standby;
- E. Full emergency;
- F. Aircraft accident/incident
  - I. Aircraft type;
  - II. Persons on board;

- III. Fuel endurance;
- IV. Location of accident/incident;

- G. VIP/Presidential movement;
- H. Fuel spillage;
- I. Bird concentration;
- J. To sweep debris/loose stones on movement areas; and
- K. Missed approach of an arriving aircraft.

RFFS shall keep ADC promptly advised on the following:

- A. Strength;
- B. Status of equipment;
- C. Condition of the runway after conducting runway surface and lighting inspection ;
- D. Any other pertinent information