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ANNUAL REPORT
1961

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**NAIROBI AIRPORT
ANNUAL REPORT
1961**

KENYA NATIONAL ASSEMBLY

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NAIROBI AIRPORT ANNUAL REPORT, 1961

INTRODUCTION

Review of the Year

The rate of expansion in the Airport's activities, which was experienced in its first three years of operation, became accelerated during 1961. This was due to a normal annual increase in passenger flow being associated with further heavy jet re-equipment programmes. With their faster speeds and high utilization rates resulting in an almost even spread of schedules between day and night, full and effective manning of all the Airport's facilities was required throughout the 24 hours of each day.

To keep pace with this expansion and to meet new and emerging requirements for the operation of an International Airport, further installations and additions had to be effected. These included the provision of Radar, an Instrument Landing System, additional rest room accommodation, an extension to the Administrative Section of the Terminal Building, a large capacity deep-freeze chamber, additional Engineering Stores, air conditioning in the Control Tower, new Bonded Stores, and the construction of a building to house additional stand-by electrical generating equipment due for delivery early in 1962. At the same time, work was commenced on an extension to the runway and an order placed for Runway Visual Approach Slope Indicators.

During the November floods, when road and rail links between Nairobi and the Coast were severed, the Airport, due to its all-weather characteristics, played a vital role in the transfer of passengers and perishable commodities between the two places. Likewise, the Airport was able to provide facilities for military aircraft engaged in famine relief food drops at a time when the runway at Eastleigh was unserviceable due to wet weather conditions.

Associated with R.A.F. operations at the Airport was the completion of a bitumen-surfaced link road between R.A.F. Eastleigh and the Airport; reducing the distance between the two airfields to seven miles.

Excluding military personnel engaged in full-time duties at the Airport, the total number of staff employed by all organizations within the boundary of the Airport was 2,727 at the end of the year.

Statistical data, compiled for the year 1961, and contained in the Appendices to this Report, show that, compared with 1960, there was a 6.5 per cent increase in civil aircraft movements, a 25.7 per cent increase in passengers handled, an 11.7 per cent increase in mail, and a 21.5 per cent increase in freight.

PART I—WORK OF THE DEPARTMENT

1. Operations

(a) GENERAL

By the end of the year over 83 per cent of all scheduled International Aircraft Movements operated through the Airport were being flown with propeller/jet and pure jet aircraft. Despite this almost overnight change from the piston engined services of the years immediately prior to 1961, experience in the handling of the new type of aircraft has shown that the ground handling techniques evolved in advance of their introduction have been more than adequate in meeting airlines' operational requirements.

(b) RUNWAY/APRON/TAXIWAYS

To satisfy the take-off requirements of the large jets when fully loaded and operating in moderately high temperature conditions, work was commenced on 14th August on an extension of the runway to 13,500 feet. It is anticipated that the project which was held up by the unprecedented heavy rains in the last quarter of the year, will be completed by mid-1962. Additionally, further grass planting has been undertaken on the verges to the taxiways, to minimize the risk of jet engine ingestion of dust. A telephone was installed at the 06 end of the runway over which it is intended to pass to the Air Traffic Controller, Runway Visual Range measurements.

(c) AIRCRAFT SERVICING

Although the year was marked by a further swing from piston engined to jet aircraft operations, it was found that engineering services required for the latter type of aircraft was well within the scope of aircraft servicing facilities available at the Airport. Whenever heavy repair facilities were required by airlines not based at Nairobi Airport these were made available by East African Airways. During the year work was put in hand for the construction of new Engineering Stores, consisting of 10 bays and associated offices and lock-ups for technical spares. Their completion, scheduled for the end of November, was delayed owing to the excessive rains occurring towards the end of the year.

(d) FUELLING

With the introduction of further heavy jet aircraft there followed an upsurge in the amount of aviation fuel being uplifted. By the end of the year this was averaging almost 1,250,000 gallons per month. Whereas in 1959 and 1960 the amount of aviation turbine fuel (paraffin) accounted for about 49 per cent of the total of all fuels dispensed; in 1961 this percentage had jumped to almost 80. In connexion with the quantity of fuel uplifted by the heavy jets, it will be of interest to note that the full fuel load alone of a Boeing 707 weighs about 49,000 lb. more than a fully loaded Super Constellation, and about 43,000 lb. more than a DC7C in a similar condition.

During the year the satellite tank farm pumping system, which was hitherto started and stopped manually, was fitted with automatic controls. Thereby the pumps in the farm start up automatically as soon as a demand for avtur is created at the apron fuel hydrants.

Following the disruption caused in early November to road and rail communications between Nairobi and Mombasa by floods, supplies of aviation fuel on the Airport fell to alarmingly low levels. To eke out stocks it became necessary on 17th November to impose a number of restrictions on supply. These were notified to all concerned in a Notice to Airmen. All restrictions on the availability of fuel were not lifted until 30th November.

Oil companies providing fuel uplift facilities at the Airport to enable them to meet the fuelling requirements of their airline customers now consist of Messrs. Shell, Stanvac, Caltex and Ozo.

(e) APRON SERVICES

Responsibility for the smooth and efficient running of apron services is vested in Government Apron Marshals who maintain continuous watch-keeping duties throughout each and every 24-hour day. Hitherto, one Apron Marshal per shift was considered sufficient to exercise the degree of control then required. When peaks in the number of aircraft movements gave warning that the services of more than one Marshal at a time would be required, steps were undertaken to introduce a training scheme for future Marshalls. The first intake under this scheme commenced their training in August.

An indication of the degree of responsibility resting with Apron Marshals was demonstrated at 09.00 hours on 5th July when seven Britannias, two Comet IVs, two Canadairs, one Victor, one Valiant and one DC4 were all parked on the Terminal Apron at the same time. A conservative estimate places the value of these aircraft at nearly £17,000,000.

(f) PASSENGER HANDLING

As present traffic tendencies are for international services to stage through Nairobi Airport in the mid-morning and late evening hours, clashing in the arrivals and departures of aircraft in these periods taxed passenger-handling facilities to the utmost. In this connexion passenger densities averaging more than 200 at a time, were occurring daily in the Transit Lounge where, on 30th June, 332 passengers had to be accommodated in the lounge at the same time.

Coincidental with the needs of such large numbers of passengers in the Transit Lounge were those of the incoming passengers. This can be illustrated by mentioning that within the space of two and a half hours on 25th September one airline company alone handled more than 740 passengers.

A study undertaken during one of the busiest months of the year and spread over 56 international flights revealed that an average of 26½ minutes elapsed between the arrival of an aircraft and the time when the last of its passengers had been cleared through the Immigration and Customs formalities.

(g) BAGGAGE HANDLING

Coincidental with the handling of greater numbers of passengers at any one time is the need to contend with greater quantities of baggage during such periods. This requirement was not outside the scope of the baggage equipment employed, but to meet the demand for labour, an additional 30 porters had to be recruited early in January. By the end of the year the volume of passengers' baggage, freight and mail to be handled had increased to such an extent that steps were taken to engage a further 36 porters.

To ensure that baggage-handling equipment when unattended and lying in proximity to aircraft is not set in motion by the blast created by running engines, steps were taken to have all baggage trollies fitted with parking brakes.

During the year a study of baggage-handling procedures for international flights showed that an average of 10½ minutes elapsed between the time when each aircraft was parked and all the baggage belonging to passengers disembarking at Nairobi Airport had been received in the Customs Baggage Hall.

(h) AIR CARGO HANDLING

This aspect of operations at the Airport continued to grow apace and played a not inconsiderable part in furthering the export of Kenya products. During the year butter, eggs, fresh vegetables, biscuits, bacon, fresh and cooked meats were exported to Aden, whilst pineapples and French beans went to the United Kingdom; biscuits to the Rhodesias; fresh flowers to Aden, Tanganyika and Rhodesia; tea seeds to Madagascar, Rhodesia and the Congo; pyrethrum to practically all parts of the world, etc.

Incoming air cargo included urgently needed spare parts for vehicles and industrial equipment, pedigree livestock, vaccines, United Kingdom newspapers, etc.

(i) LIVESTOCK HANDLING

Normally, livestock imported or exported through Nairobi Airport and retained at the Airport for more than two hours are accommodated in the Airport's Livestock Holding Station. Exceptions to this are those animals whose temperament requires that they be disturbed as infrequently as possible. Subject to compliance with certain conditions, it is possible for the direct loading or unloading of livestock between road vehicles and aircraft.

(j) MAIL HANDLING

Although the quantity of air mail handled exceeded that for 1960 by 11.7 per cent, no revision of the procedures for its delivery to and collection from aircraft was considered necessary. The system evolved, of allowing post office vehicles to proceed direct to parked aircraft, not only facilitated the latter's quick turn round, but also assisted in the expeditious handling of mail.

(k) EMERGENCY REMOVAL OF AIRCRAFT

As Nairobi Airport has only one runway, any aircraft accident resulting in the obstruction of that runway would necessitate the diversion of other aircraft, disrupt communications generally, and inconvenience members of the travelling public. To ensure that such obstructions can be removed with a minimum of delay, certain items of salvage equipment were purchased. These, in conjunction with other items available on loan from outside organizations in Nairobi, are considered to be adequate for the lifting, after strip-down, of the heaviest type of aircraft now operating through the Airport.

In an endeavour to assist Airline Operators to raise and remove any aircraft which might be obstructing the runway, the Airport Authority compiled and circulated lists of salvage equipment available; sources from which it can be drawn were circulated.

(l) JET OPERATIONS

Further jet re-equipment programmes were effected during the year. In May, Air India commenced Boeing 707 operations, with one return service a week from Bombay. In October this was stepped up to twice a week. During the same month Air France introduced Boeing 707s on their twice-weekly services from Paris to Tananarive. When Scandinavian Airlines commenced operations in November with DC8s, eight out of the 12 International Airlines using the Airport on scheduled flights were operating pure jet services.

(m) LEGISLATION

In exercise of powers conferred by section 3 of the Aerodromes Regulation Ordinance, 1960, the Minister for Commerce, Industry and Communications, on 1st August, made the following Regulations:—

“The Aerodrome (Nairobi Airport) Regulations, 1961.”

In accordance with the provisions of Article 54 of the Colonial Air Navigation Order, 1955, and in exercise of all other powers hereunto enabling him, the Minister for Commerce, Industry and Communications revoked with effect from 8th August, 1961, Legal Notices Nos. 102, 103, 222 and 223 of 1958, and Legal Notice No. 119 of 1960, and notified Legal Notice No. 462 "Use of Government Aerodromes" as being effective in lieu thereof.

(n) PROJECT MERCURY

Commencing in August and continuing thereafter at an average frequency of every six weeks, the United States Air Force positioned units of their Air Rescue Services at the Airport for detachments each of approximately 7 days' duration. The detachments were undertaken in connexion with orbital flights of Mercury space capsules whose paths tracked over the African Continent. The A.R.S. units would only have been brought into use had it been necessary to land the capsules in other than the predetermined recovery area off the south-east coast of the United States of America. Whilst detached to the Airport in November for this purpose, aircraft of the formation dropped 45,000 lb. of famine relief food.

(o) R.A.F. USE OF NAIROBI AIRPORT

During the year the R.A.F. made increasing use of the Airport and its facilities.

(p) FLOOD AND FAMINE RELIEF

In early November, when prolonged and heavy rains produced flood conditions in famine areas of Kenya, it became necessary to call on the Military Forces to undertake the delivery of urgently needed food by supply dropping. Between 13th November and the end of December, Military aircraft belonging to the Royal Air Force, the Royal Rhodesian Air Force, the Army Air Corps and United States Air Force, free dropped nearly 4,000,000 lb. of food on the following sorties from Nairobi Airport:—

R.A.F. Beverleys	..	163 sorties	..	3,430,000 lb.
R.R.A.F. Dakotas	..	59 sorties	..	363,420 lb.
A.A.C. Beavers	..	17 sorties	..	11,874 lb.
U.S.A.F. C.130s	..	3 sorties	..	45,000 lb.

(q) OPERATIONAL AND ADMINISTRATIVE INSTRUCTIONS

In order to provide sound management, ensure safeguards for all users of the Airport, and to maintain a high degree of co-operation amongst all staffs at the Airport, further Operational and Administrative Instructions were issued during the year under review. Subjects covered include:—

- Allocation of Parking Bays,
- Access to Roofs of Airport Buildings,
- Aircrew Dining-room,
- Compass Swinging,
- Control of Dogs upon Airport Premises,
- Emergency Alerting Procedures,
- Foreign Exchange Facilities,
- Fuelling of Aircraft,
- Freight Shed and Control Tower Gates,
- Fire Precautions,
- Ground Handling Equipment—Safety Precautions,
- Left Luggage/Lost Property Office,
- Refreshments—Transit Lounge,
- Refuse Collection Service,

Runway Extension,
 Sanitation,
 Traffic Direction—Main Car Park,
 Terminal Apron—Communications,
 Tannoy Broadcasts,
 Terminal Apron—Tulip Power Sockets,
 Toilet Facilities—Transit Lounge,
 Use of Typewriter positioned in the Transit Lounge,
 Vehicle Traffic on the Aircraft Parking Apron,
 Medical Facilities,
 Premeditated Wheels-up Landings,
 Emergency Removal of Aircraft.

2. Aerodrome Fire Service

(a) GENERAL

The Airport Fire Service plays a great part in the overall safety of the Airport, covering domestic risks and accidents to aircraft. A 24-hour duty covered by three distinct crews, enables all aircraft movements to be covered. During periods of slack movements, daily drills and exercises are carried out to keep the crews up to full efficiency. Appliances and equipment are checked twice daily, at change of watches, so that any minor snags may be easily found and rectified. The line strength is maintained to its full level at all times.

(b) EQUIPMENT

The most modern Fire Equipment is in use on the Airport and comprises:—

Foam Tenders	3
Water Tenders	2
Rescue Land Rovers	2
Ambulance	1
General Vehicle	1

This equipment provided for immediate use, 22,400 gallons of high expansion foam (which can be delivered at 8,000 gallons per minute), and 1,000 lb. of CO₂ gas (delivered at 200 lb. per minute). Sufficient foam compound is carried to provide a further 22,400 gallons of high expansion foam if water supplies are available.

(c) TRAINING

Early in January of this year, a Fire Services Training School was opened at the Airport to enable all ranks to be taught the latest methods of combating fires, whether aircraft or domestic. This training falls into three distinct classes, Potential Officers, New Recruits and Refresher Courses for established ranks. The overall efficiency of the services should greatly benefit from this specialized training.

(d) ANALYSIS OF CALLS

Aircraft Accidents	Nil
Full Emergencies	3
Incidents Involving Aircraft	12
Hot Wheels	4
Fuel Spillage	25
Buildings	1
Grass Fires	3
Unclassified	Nil

(e) CASUALTIES

Nil.

3. Business Management

(a) GENERAL

Increasing use of the Airport's facilities was reflected in an overall growth in revenues which were augmented by the introduction of further money-earning sources such as a Left Luggage Office and Photographic and Weighing Machines.

(b) ACCOMMODATION

To meet ever-increasing demands for office and rest-room accommodation in the Terminal Building, it became necessary to effect further provisioning of this type of accommodation. To this end a new Stores was constructed, allowing the withdrawal of items of equipment from offices misappropriated for this purpose. Additionally, the construction of a new Conference Room meant that a room hitherto used for conferences could revert to its designed function as a crew dining and rest-room. Associated with the construction of new Stores was the provision of a P.A.B.X. Equipment Room.

(c) P.A.B.X.

Although manned on the basis of automatic operation, the barring of a large number of extensions to Level 9 facilities, continued to place a heavy work load on operators. This load reaches a peak when delays to airline schedules increase the frequency of telephone enquiries for information.

(d) CLEANER SERVICES

As the Airport operates on a 24-hour basis it is essential that constant attention be given to keeping the Airport buildings and their surrounds in a clean and tidy condition. Where possible, cleaning of the public areas is undertaken in those hours when such activity will create the minimum of disturbance and inconvenience to members of the public.

(e) ADVERTISING

Due to some retraction in commercial activities in Kenya, and also possibly to the competitive nature of other advertising media, e.g. sound broadcasting, there were some cancellations of advertising contracts during the year.

(f) AMENITIES

To improve the presentation of items of ornamental colour in the Arrivals Lounge, and also to ensure that they would not be disfigured through handling by an interested public, a wire mesh screen was erected in front of the display.

Organized visits to the Airport continued to prove popular with school children, over 6,900 of whom made use of this amenity during the year.

(g) CATERING

Catering facilities within the Terminal Building are provided under contract with Government by Caterair Ltd. This company, and also N.A.S. Airport Services, provide the catering uplift requirements for the airline companies.

As a facility for in-transit and departing passengers travelling on international airlines on certain routes, there was erected in the Transit Lounge, a display cabinet for wines and spirits which could be delivered duty free on board aircraft against an order placed and paid for in the Transit Lounge.

(h) CONCESSIONAIRES

To ensure that the requirements of arriving, departing and in-transit passengers were adequately provided for, tender action was taken for the operation by concessionaires of shopping facilities within the Terminal Building. Tender action was also taken for the provision of a taxi service.

(i) REFUSE COLLECTION

The refuse collection service, hitherto provided on a charge basis by the Ministry of Works, ceased to function on 14th August, from which date the service was taken over by the Nairobi County Council.

(j) FOREIGN EXCHANGE FACILITIES

Foreign exchange facilities for passengers were provided daily between 08.30 and 20.30 hours by a branch of Barclays Bank situated in the Main Concourse of the Terminal Building. Transit passengers wishing to make whole or part payment for goods or services rendered within the Transit Lounge, were able to avail themselves of cash exchange facilities provided by Messrs. Patwa (Embakasi) Ltd., Afro Aircraft and Caterair Ltd. Current exchange rates are displayed within the Transit Lounge. It is anticipated that Messrs. Barclays Bank (D.C.O.) will provide hours of service from 08.30 to 23.59 daily as from the beginning of 1962.

(k) WAVING BASE

The Waving Base continued to prove an attraction for visitors to the Airport, 263,337 of whom made use of its facilities during the year under review. To facilitate entry to the Waving Base, turnstiles were installed. Arrangements were made to extend until 1 a.m. or until the last customer departs, whichever is the later, dining facilities within the public restaurant.

A popular installation on the Waving Base has been an automatic photographic machine which delivers a group of four snapshots about three minutes after being taken.

(l) LEFT LUGGAGE/LOST PROPERTY OFFICE

On 1st July, the Left Luggage/Lost Property Office in the Terminal Building, which in the past had been operated on an individual basis by airline companies, was staffed and administered by the Airport Authority. This facility was made available throughout each 24-hour day.

4. Security

(a) GENERAL

Although the number of passengers and visitors using the Airport continued to increase the incidence of crime continued to be low. The Security Force recovered 140 articles of lost property and, on 30 occasions, persons suspected of having committed offences were handed over to the police.

During the year the Force undertook the responsibility of guarding the gates giving entrance to the Terminal Apron.

In exercise of the powers conferred by subsection (4) of section 3 of the Aerodrome Regulation Ordinance, 1960, the Minister for Commerce, Industry and Communications, under Gazette Notice No. 3931, of 15th August, 1961, appointed named officers to discharge the functions of Security Officers at the Airport.

(b) VEHICULAR TRAFFIC ARRANGEMENTS

Following legal opinion that Traffic Ordinance No. 39 of 1953, applied within the Airport boundaries, the designated Highway Authority for the Airport under section 67 of the said Ordinance, authorized the placing of appropriate traffic signs within the Airport boundaries.

5. Information Services

Nairobi Airport Information Service is provided from an Information Kiosk situated in the Main Concourse of the Terminal Building. Although the main function of the service is the provision of flight information to members of the public, Information staff consisting of one Senior and eight other Receptionists, hold themselves available to answer queries on Kenya's tourist attractions posed by visitors to the country. To this end a comprehensive range of tourist literature is maintained at the Information Kiosk.

To meet peaks in aircraft movements, occurring in mid-morning and late evening hours, shift duties at the Information Kiosk are arranged to give double cover during these periods.

During the year a trainee scheme for Receptionists was introduced. It is intended that qualified Receptionists of the future will emerge from this source.

6. Additional Kenya Government Services

(a) Other Kenya Government Departments and Ministries providing services at the Airport are:—

- The Ministry of Works,
- The Kenya Police,
- The Immigration Department,
- The Medical Department,
- The Veterinary Department.

(b) MINISTRY OF WORKS

Aerodrome Maintenance (Works Services)

Although the Ministry of Works Aerodrome Maintenance Section is primarily responsible for the maintenance of Airport buildings, runways, taxiways, aprons, roads and drains, sewage and water supplies, it was active throughout the year in effecting and supervising the provision of new works services, e.g. the fitment of kerbstones to the Airport roads, a new Engineering Stores, a large capacity deep freeze chamber, construction of additional toilets and showers in the Transit Lounge, additional Stores and Rest Rooms in the Terminal Building, new Bonded Stores, a Radar Tower, air-conditioning in the Control Tower, and an extension to "A" sub-station generator house to hold new plant, as well as all preparatory work for an extension to the runway. To meet these requirements the section holds a wide a range of mechanical and other civil engineering equipment.

Aerodrome Maintenance (Electrical)

E.A. Power and Lighting mains supply of electricity is delivered to a switchboard in "A" sub-station. From that point the Electrical Maintenance Section assumes responsibility for the maintenance of all cables and electrical installations within the Airport. In addition, the section is responsible for maintenance of emergency supplies of electricity from stand-by generating plants, whose output will be increased early in 1962 by the installation of a new 200 kw. auto-start generator and a new "no break" set of 125 K.V.A.

The section was also fully extended in providing electrical installations for new constructions and undertook considerable cable laying for the I.L.S. It was also responsible for repositioning runway lighting installations necessitated by the runway extension.

(c) KENYA POLICE

A Kenya Police detachment, accommodated in a building of modern construction, is located on the Airport. Control of the detachment is effected from Embakasi Village Police Station, which comes under the jurisdiction of the Divisional Commander, Southern Division.

Apart from the performance of normal police duties, the detachment cooperated with the Airport Security Force in effecting crowd control measures during arrivals and departures of distinguished and politically prominent persons. Similarly, members of the Kenya Police rendered valuable assistance during aircraft emergency alerts.

(d) IMMIGRATION DEPARTMENT

This department is responsible for the control of intending immigrants and visitors to the Colony, and for checking movements of passengers in transit destined for abroad.

A staff of one senior and six other Immigration Officers provide immigration facilities throughout the day and night.

(e) PORT HEALTH AUTHORITY

Throughout the year the duties of the Port Health Authority were administered by the Ministry of Health through a Port Health Officer and a resident Port Health Inspector.

These duties have included the application of the International Sanitary Regulations to arriving and departing aircraft and to the Airport as a whole; inspection of food preparing premises, sampling of food, milk and water, and mosquito control measures.

The Ministry of Health also provides a resident Nursing Sister in Charge of the First Aid Room at the Airport.

(f) DEPARTMENT OF VETERINARY SERVICES

All livestock imported into Kenya through the Airport, is inspected by Veterinary Officers of the Department of Veterinary Services.

7. East African Common Services Organization**(a) GENERAL**

Services of a specialist nature at Nairobi Airport were provided by the following departments of the East African Common Services Organization:—

- The Directorate of Civil Aviation,
- The East African Customs and Excise Department,
- The Meteorological Department,
- The East African Posts and Telecommunications Administration.

(b) DIRECTORATE OF CIVIL AVIATION

The Directorate of Civil Aviation has maintained operation of its usual services during 1961 and the year has been one of continued expansion of service.

Installation of the Instrument Landing System was completed and the equipment placed in service in March. The system has proved most satisfactory in operation.

The Cossor-type 787 Surveillance Radar was also placed in service on an operational trials basis in March, but owing to an overall shortage of Control Officers it was not possible for other than partial use to be made of this facility.

By the end of the year almost all the scheduled International Operators were using prop jet or pure jet aircraft with almost 50 per cent of the scheduled movements taking place at night in order to fit in with convenient arrival and departure times at London and Johannesburg.

(c) EAST AFRICAN CUSTOMS AND EXCISE DEPARTMENT

The East African Customs and Excise Department maintain—

- (i) a 24-hour service at the Airport for the clearance of passengers' baggage. In spite of the increased volume of traffic, this service effected baggage clearance without extra staff or delay to passengers ;
- (ii) a 24-hour service for clearing air crews and the uplift of stores for aircraft and passengers ;
- (iii) a service for clearing freight. Again, the increased volume of traffic was handled without extra staff or delay.

(d) EAST AFRICAN METEOROLOGICAL DEPARTMENT

Although the serious staff shortage continued during the first half of the year the aviation forecast service was maintained throughout the 24 hours by the Meteorological Department. As a result of the recruitment of more staff the analysis service was extended to cover 12 hours of the day later in the year.

A wide variety of aviation forecasting was required throughout the year with an ever-increasing emphasis on high-level forecasts for long-distance jet aircraft. A new form of presentation of upper wind and temperature forecasts was introduced in line with modern trends for all medium and long-range flights. The form of forecast for internal services within East Africa was also altered and it now consists of a chart showing significant weather and winds.

In order to prepare these forecasts, charts of the whole of Africa, India and part of Europe for both surface and the standard upper levels in the atmosphere were prepared and analysed daily, thus providing a very adequate display for the briefing of air crew on both short and long-range flights.

Military commitments were considerable throughout the year, but were greatly increased during the Kuwait crisis and during the flood relief operations, when the Royal Air Force operated a shuttle service requiring many non-routine forecasts.

(e) EAST AFRICAN POSTS AND TELECOMMUNICATIONS ADMINISTRATION

A full range of Post Office services is provided in the Airport Post Office. These include the direct handling of mail requiring despatch to other destinations, under which about 300 kgs. of mail are transferred daily. Additional limited services such as the sale of stamps and the acceptance of telegrams and cables is provided in the Transit Lounge. A mail delivery service is provided through the medium of private box installations.

PART II—APPENDICES**SENIOR STAFF OF THE DEPARTMENT**

Senior staff for the year under review were as follows:—

Airport Commandant	Mr. T. R. Thomson, A.R.Ae.S., F.R.Met.S., M.I.N.
Deputy Airport Commandant	Mr. G. T. van Weegen, A.R.Ae.S., F.R.Met.S., M.I.N.
Senior Operations Officer ..	Mr. B. V. Kerwin, D.F.C.
Business Manager	Mr. V. R. Edmiston.
Security Officer	Mr. P. N. Smith.
Executive Officer	Mr. J. N. Bell.
Operations Officer	Mr. V. F. Bilbrough.
Senior Receptionist	Mrs. L. N. Hoare.
Chief Supervisor, P.A.B.X. ..	Mrs. M. V. Bromley.

AIRCRAFT MOVEMENTS

Month	SCHEDULE COMMERCIAL		OTHER COMMERCIAL		OTHER NON-COMMERCIAL		CHARTER		PRIVATE		TEST AND TRAINING		TOTALS 1961		TOTALS 1960	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Civil		Military	
													In	Out	In	Out
January ..	406	406	15	14	8	21	20	9	9	57	57	516	514	333	488	493
February ..	376	372	34	34	11	19	21	13	13	136	136	589	587	501	497	493
March ..	401	404	20	20	30	21	20	3	3	159	159	634	636	449	536	539
April ..	437	435	16	15	20	12	13	1	1	68	68	554	552	417	583	583
May ..	439	437	20	20	20	19	13	1	1	183	182	676	672	291	598	598
June ..	454	453	13	13	13	22	21	2	2	127	128	631	630	388	632	623
July ..	445	447	21	20	19	32	31	4	4	96	97	617	618	76	597	600
August ..	458	461	17	18	9	15	16	1	1	152	152	652	658	118	637	637
September ..	453	453	19	19	3	19	17	2	2	180	180	678	674	88	564	565
October ..	442	447	19	18	3	25	26	1	1	174	174	664	669	66	542	536
November ..	421	420	13	14	6	21	23	1	1	185	185	647	648	376	831	831
December ..	456	458	10	10	17	39	38	2	2	169	169	693	694	122	588	595
TOTALS ..	5,190	5,193	217	215	158	259	259	40	40	1,686	1,687	7,551	7,552	3,218	7,092	7,092
																3,803
																3,787

1. AIRCRAFT MOVEMENT—

Is a landing or a take-off by one landing or one take-off.

2. SCHEDULED COMMERCIAL MOVEMENT—

Is a landing or a take-off by an aircraft engaged on a commercial air transport flight operated to a published schedule.

3. OTHER COMMERCIAL MOVEMENT

Is a landing or take-off by an aircraft engaged on aerial work for hire and reward, but not when carrying passengers.

4. OTHER NON-COMMERCIAL MOVEMENT—

Is a landing or take-off by an aircraft operated for the purposes of positioning for a scheduled flight, or for the purposes of a flight to carry stores or spares and not flown for hire or reward. It also includes those landings made by aircraft forced for reasons of safety, to return to the point of departure. It includes flights by Government owned and operated aircraft.

5. CHARTER MOVEMENT—

Is a landing or a take-off by an aircraft carrying passengers for hire or reward when not operating to a published schedule.

6. PRIVATE MOVEMENT—

Is a landing or a take-off by an aircraft owned and operated for private purposes.

7. MILITARY MOVEMENT—

Is a landing or a take-off by a British or foreign military aircraft for military purposes.

8. TEST AND TRAINING MOVEMENT—

Is a landing or a take-off by an aircraft flown for the purposes of testing an aircraft or for flying training of the personnel carried therein. It also includes proving flights.

APPENDIX III

PASSENGERS HANDLED

Month	In	Out	*Transit	Total 1961	Total 1960
January	8,113	8,104	6,051	28,319	20,031
February	6,924	7,573	4,763	24,023	19,403
March	7,102	8,692	6,083	27,960	20,207
April	7,448	8,802	7,856	31,962	24,323
May	7,725	8,600	8,200	32,725	25,741
June	8,120	8,496	8,333	33,282	25,869
July	9,630	10,176	9,401	38,608	34,409
August	9,163	9,892	8,945	36,945	31,309
September	10,112	11,000	8,896	38,904	29,671
October	8,262	8,856	7,289	31,696	28,314
November	9,026	9,945	5,313	29,597	24,007
December	10,634	11,227	7,700	37,261	28,024
TOTALS	102,259	111,363	88,830	391,282	311,308

* TRANSIT PASSENGER

Is one whose air journey does not begin or end at the reporting aerodrome. Each transit passenger is shown as two passengers handled in the Total column.

APPENDIX IV

MAIL (Kgms.)

Month	In	Out	Total 1961	Total 1960
January	42,621	38,097	80,718	74,889
February	42,241	36,800	79,041	70,271
March	44,680	40,389	85,069	79,201
April	42,927	36,076	79,003	74,145
May	42,676	37,709	80,385	77,463
June	45,589	38,191	83,780	76,280
July	48,826	41,113	89,939	78,433
August	46,275	40,385	86,660	74,856
September	46,233	38,312	84,545	79,876
October	46,726	39,338	86,064	82,830
November	52,461	48,759	101,220	78,765
December	68,018	58,189	126,207	103,835
TOTALS	569,273	493,358	1,062,631	950,844

MAIL:

Despatches of correspondence and other objects tendered by and intended for delivery to Postal Administration.

FREIGHT (Kgms.)

Month	In	Out	Transit	Total 1961	Total 1960
January ..	112,292	244,515	196,637	553,444	421,975
February ..	137,328	242,950	204,486	584,764	480,147
March ..	130,760	266,926	244,190	641,876	529,256
April ..	131,554	271,850	194,306	597,710	487,806
May ..	140,148	281,804	206,943	628,895	496,254
June ..	121,384	281,076	219,927	622,387	461,626
July ..	121,960	260,623	243,089	625,672	540,386
August ..	114,392	268,755	221,113	604,260	539,463
September ..	151,635	272,801	202,793	627,229	512,800
October ..	126,233	301,868	224,800	652,901	595,325
November ..	159,292	303,695	193,662	656,649	575,309
December ..	166,736	297,917	235,231	699,884	527,993
TOTALS ..	1,613,714	3,294,780	2,587,177	7,495,671	6,168,340

FREIGHT

Excludes company stores, excess baggage, post office mail and diplomatic bags.

LIVESTOCK—IMPORTS 1961

Type	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Bears ..	—	—	—	—	—	1	—	—	—	—	—	—	1
Birds ..	60	—	—	—	—	101	—	—	—	28	2	—	266
Bush Babies ..	—	2	—	—	1	—	—	—	—	—	—	—	3
Cattle ..	—	—	—	1	—	1	2	—	6	1	—	—	16
Cats ..	—	6	—	2	1	3	1	2	2	12	3	5	38
Chameleons ..	—	—	—	—	2	10	20	—	—	—	—	3	35
Cheetahs ..	—	2	—	—	—	—	—	—	—	—	—	—	2
Chinchillas ..	—	—	—	—	—	—	—	—	—	—	64	—	64
Cranes ..	—	—	—	—	2	—	—	—	—	—	—	—	2
Crocodiles ..	—	—	—	—	—	1	—	—	—	—	—	—	2
Day Old Chicks ..	758	707	1,925	968	5,695	5,750	1,050	3,577	4,770	4,090	4,026	1,660	34,976
Dogs ..	14	6	5	5	18	11	21	9	7	21	18	19	144
Ducklings ..	—	—	—	—	—	100	300	800	600	1,280	3,756	1,150	7,986
Fish (Cartons) ..	—	—	—	—	—	2	—	2 tins	—	—	—	—	2
Frogs ..	—	—	—	—	—	—	—	—	—	—	—	—	2
Hamsters ..	—	8	—	—	—	—	—	—	—	—	—	—	16
Lions ..	—	—	—	—	—	—	—	—	—	5	2	—	7
Lizards ..	—	—	—	—	2	—	20	—	—	—	—	—	22
Mice and Rats ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Mink ..	—	1	—	—	—	—	—	—	—	—	1	—	1
Owls ..	—	—	—	—	—	—	—	—	—	5	—	—	1
Parrots ..	—	2	—	2	1	4	2	—	2	2	—	1	16
Pheasants ..	—	—	—	—	—	—	—	2	—	2	—	—	4
Pigs ..	—	—	—	—	—	4	1	—	—	—	2	—	8
Rabbits ..	—	—	—	—	—	—	—	—	—	—	2	—	2
Rams ..	—	—	—	3	—	—	—	3	—	—	—	—	8
Snakes ..	—	—	—	—	—	—	20	—	—	38	—	40	98
Squirrels ..	—	—	—	—	—	—	—	—	—	—	—	—	2
Tortoise ..	—	—	—	—	—	4	—	—	—	—	—	—	4
Turkeys (Day Old)	—	—	—	—	—	—	—	60	—	300	250	250	860

LIVESTOCK—EXPORTS 1961

Type	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Antelope..	—	—	—	—	3	—	—	—	—	—	—	—	3
Baboons..	95	105	46	45	36	53	—	31	44	76	178	150	861
Barn Owls	—	—	—	—	2	—	—	—	—	—	—	—	2
Birds (Small)	—	600	5	750	—	1,231	823	135	3,323	6,286	1,897	108	15,158
Bush Babies	—	1	5	18	1	14	7	10	11	—	29	22	118
Bush Buck	—	—	—	—	1	—	—	—	—	—	—	—	1
Bustard ..	—	—	—	—	1	—	—	—	—	—	—	—	1
Caracal ..	—	—	—	—	—	—	—	—	1	—	—	—	1
Cats ..	5	10	7	9	3	15	2	13	5	16	11	10	106
Chameleons	—	80	80	80	30	20	20	—	—	50	—	3	363
Cheetahs..	—	1	4	3	—	—	—	2	—	—	2	—	12
Chimpanzee	—	—	—	—	1	—	—	—	—	—	—	—	1
Chinchillas	—	—	—	—	26	—	15	—	—	—	64	6	111
Civet Cats	1	—	—	—	—	—	—	—	—	—	—	—	1
Cranes ..	—	—	—	—	—	—	6	—	—	—	—	—	1
Crumcolins	—	—	7	4	—	—	—	—	14	—	—	1	32
Day Old Chicks	—	—	—	—	—	—	—	—	12	—	—	—	12
Day Old Turkeys	2,112	2,615	2,083	1,248	3,829	3,749	4,443	3,437	2,452	2,874	4,689	3,270	36,791
Dik-Dik ..	—	—	—	—	—	100	—	—	—	—	—	—	100
Dogs ..	26	18	22	37	20	26	25	42	31	52	35	36	370
Duikers ..	—	—	—	—	2	—	—	—	—	—	—	—	2
Ducklings	—	—	—	—	—	—	5	—	—	—	—	—	5
Eagles ..	—	—	2	4	—	—	—	—	6	1	—	—	13
Elephant..	—	—	4	—	—	—	—	—	1	—	—	1	6
Falcons ..	—	—	—	—	—	—	—	—	2	—	—	—	2
Fish (Cartons)	—	—	—	—	—	1	—	—	—	—	—	—	1
Flamingoes	—	—	—	—	20	120	—	—	43	—	—	—	183
Flying Foxes	—	—	—	2	—	—	—	—	—	—	—	—	2
Frogs ..	—	150	—	—	—	—	—	—	—	—	—	—	150
Gazelles ..	—	—	—	12	7	—	—	2	—	—	—	—	21

LIVESTOCK—EXPORTS 1961

Type	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Genet	1	..	..	..	..	1	..	..	..	2
Goats	1	..	..	..	..	..	..	..	1
Golden Cats	1	..	..	..	1
Gorilla	2	..	..	..	..	..	..	..	2
Guinea Fowls	2	..	..	..	8	..	..	..	10
Hamsters	8	..	..	..	8	..	..	..	..	..	..	8
Hammerheads	3	..	..	..	3
Hares	1	..	..	..	..	..	..	1
Hedgehogs	1	..	..	..	..	..	..	..	1
Hartebeeste	2	..	..	..	..	..	..	2
Hérons	6	3	..	..	5	..	..	..	14
Hornbills	1	..	1
Horses	1	..	..	..	..	..	..	..	..	..	1
Hyenas	1	..	..	..	..	..	..	..	..	..	1
Hyrax	2	..	..	..	..	..	..	..	..	5
Impala	3	..	..	2	..	..	..	..	2
Jungle Cats	3	1	..	..	2	..	..	..	..	6
Kudu	3	..	..	..	..	..	..	..	..	..	3
Leopards	2	..	..	..	..	..	2	..	..	..	6
Lions	6	20	..	..	30	..	..	2	..	..	57
Lizards	2	..	..	..	..	..	1	..	..	2
Lynx	4	..	..	..	..	..	..	4
Marabou Storks	2	..	..	3	..	..	6	..	..	1	..	12
Mice and Rats	2	..	..	..	..	..	..	..	..	2
Mink	3	..	..	..	..	..	..	2	..	..	5
Mongoose	53	146	145	1,488	1,584	1,570	1,534	1,753	1,560	1,546	11,945
Monkeys ..	393	173	..	..	..	..	..	..	1	..	..	..	1
Mungo	1	..	..	..	1
Otter	1
Owls	2	..	..	2

APPENDIX VII

AVIATION FUEL UPLIFT (GALLONS)

Month	80/87	100/130	115/145	AVTUR.	Total 1961	Total 1960
January ..	148	73,850	181,723	924,073	1,179,794	547,846
February ..	76	62,980	165,830	845,224	1,074,110	586,904
March ..	—	66,695	197,615	799,902	1,064,212	558,836
April ..	58	71,477	183,024	1,039,113	1,293,672	609,040
May ..	12	71,137	171,662	1,026,540	1,269,351	770,720
June ..	54	88,233	218,488	1,078,496	1,385,271	867,828
July ..	62	81,060	224,647	1,157,411	1,463,180	1,051,652
August ..	112	88,373	206,187	973,428	1,268,100	980,878
September ..	52	67,081	212,022	925,848	1,205,003	981,307
October ..	53	93,681	136,814	1,060,253	1,290,801	1,114,610
November ..	158	120,237	151,176	884,083	1,155,654	1,089,762
December ..	36	100,974	63,661	1,059,115	1,223,786	998,919
TOTALS ..	821	985,778	2,112,849	11,773,486	14,872,934	10,158,302

APPENDIX VIII

WAVING BASE VISITORS

Month	1961	1960
January	25,648	18,416
February	17,125	17,571
March	18,146	15,830
April	23,750	20,154
May	24,825	20,482
June	20,748	18,723
July	23,795	21,514
August	27,991	26,124
September	27,023	26,221
October	20,192	20,751
November	15,746	15,480
December	18,348	24,318
TOTALS ..	263,337	245,584

APPENDIX IX

DIVERSIONS DUE TO WEATHER

Month	1961	1960
January	—	—
February	2	1
March	—	—
April	—	4
May	1	1
June	—	—
July	—	—
August	—	—
September	—	—
October	1	1
November	4	5
December	3	11
TOTALS ..	11	23
Total Arrivals ..	10,769	10,895

APPENDIX X

DELAYED ARRIVALS DUE TO WEATHER

Month	1961	1960
January	—	4
February	—	2
March	3	—
April	10	—
May	—	1
June	—	—
July	—	—
August	—	1
September	1	2
October	1	2
November	2	—
December	1	—
TOTALS ..	18	12
Total Arrivals ..	10,769	10,895

APPENDIX XI

DELAYED DEPARTURES DUE TO WEATHER

Month	1961	1960
January	—	2
February	1	2
March	3	1
April	12	7
May	5	8
June	—	—
July	—	—
August	—	—
September	—	2
October	6	—
November	8	—
December	3	5
TOTALS ..	38	27
Total Departures ..	10,767	10,879

METEOROLOGICAL DATA FOR THE YEAR ENDING DECEMBER, 1961

Month	Rainfall (inches)	MEAN HUMIDITY %		MEAN TEMPERATURE °F.		ABSOLUTE TEMPERATURE °F.		MEAN PRESSURE mb		HOURS OF SUNSHINE		No. of days with Fog or Stratus $\frac{3}{8}$ or more below 300 ft.
		00.01 G.M.T.	12.00 G.M.T.	Max.	Min.	Max.	Min.	06.00 G.M.T.	12.00 G.M.T.	Hrs.	Mins.	
January	0.03	84	40	83.9	53.8	90.0	49.6	840.5	836.9	334	22	22
February	0.47	82	35	84.5	54.8	87.8	50.4	840.5	836.6	283	05	5
March	3.69	86	41	83.8	57.1	87.1	50.5	840.5	836.9	280	19	15
April	2.88	97	55	79.9	57.7	86.0	53.6	840.2	837.1	230	48	15
May	4.26	95	50	80.3	57.6	83.8	50.5	842.0	838.8	232	46	13
June	1.21	93	47	78.7	54.4	84.0	48.0	842.0	839.1	114	53	1
July	0.20	89	47	75.5	54.4	79.9	46.4	842.2	839.5	176	42	Nil
August	0.41	89	57	74.1	55.2	80.2	50.0	842.6	839.7	74	28	Nil
September	1.30	94	56	75.7	55.4	82.8	50.9	842.0	838.6	137	19	10
October	6.37	95	54	77.9	56.1	83.1	48.2	841.1	837.0	202	28	28
November	19.05	99	67	74.2	57.6	77.4	53.6	840.4	836.4	167	55	5 days fog 28 days stratus
December	10.86	99	57	77.8	58.2	79.5	55.4	840.0	836.1	261	04	13

RAINFALL—

The total product of precipitation from the atmosphere as received and measured in inches in a rain gauge. The monthly depth of rainfall at Nairobi Airport is measured from 09.00 E.A.S.T. on the 1st of each month to 09.00 E.A.S.T. on the 1st of the following month.

MEAN HUMIDITY %—

Humidity refers to the invisible gas or vapour which may be mixed in varying proportion with the dry air of the atmosphere and is a measure of wetness. It is listed as a percentage for midnight and midday G.M.T. (03.00 and 15.00 E.A.S.T.), the periods of approximately maximum and minimum humidity.

FAHRENHEIT °F.—

A scale having the melting point of ice at 32° and the boiling point of water at 212°.

MEAN TEMPERATURE °F.—

The temperature of the air is measured in a thermometer screen at 4' 6" above ground level. The daily maximum and daily minimum temperatures are meant for the month; generally, maximum temperatures occur in the mid-afternoon and minimum temperatures just before dawn.

ABSOLUTE TEMPERATURE °F.—

The absolute maximum temperature for the month is the higher daily maximum figure recorded in that month. The absolute minimum temperature for the month is the lowest daily minimum figure recorded in that month.

MEAN PRESSURE—

The average force per unit area exerted by the air on a horizontal surface at airfield level. The mean pressures are listed for 09.00 and 15.00 E.A.S.T.; the times of approximately maximum and minimum pressures.

HOURS OF SUNSHINE—

The duration of bright sunshine is measured by a trace on a card, when the sun is shining, by a spherical glass lens. Intermittent sunshine produces broken lines the combined length of which gives direct measurement in hours.

FOG—

When, due to the presence of particles of condensed moisture suspended in the atmosphere at ground level, the horizontal visibility falls below 1,100 yards, a condition of fog exists.

STRATUS CLOUD—

A uniform layer of cloud, resembling fog but which is not resting on the ground.

GENERAL INFORMATION

1. City/Aerodrome	.. ..	Nairobi/Nairobi.
2. Latitude	.. ..	011907 South.
3. Longitude	.. ..	365533 East.
4. Location of Reference Point	..	Centre of Runway.
5. Distance and Direction from City	.. ..	6.3 N.M.—E.S.E.
6. Elevation	.. ..	5,327 feet.
7. Elevation Check Point	.. ..	5,311 feet.
8. Aerodrome Ref. Temp. (°C)	..	23.1 (Provisional).
9. Transition Altitude	.. ..	7,500 feet.
10. Transition Level	.. ..	F.L. 80.
11. Variation	.. ..	3° W.
12. Controlling Authority	.. ..	Kenya Government.
13. Operational Hours	.. ..	H 24.
14. Postal Address	.. ..	(a) Airport Commandant, P.O. Box 19001, EMBAKASI. (b) Directorate of Civil Aviation, P.O. Box 30163, NAIROBI.
15. Telegraphic Address	.. ..	(a) Airport Commandant, "AIRCOM, EMBAKASI". (b) Directorate of Civil Aviation, "ATCON, NAIROBI".
16. Telephone Number	.. ..	Embakasi 82222.
17. Overnight Accommodation	..	Hotels in City.
18. Restaurant Accommodation	..	Yes.
19. Medical Facilities	.. ..	Yes.
20. Transportation	.. ..	Buses and Taxis.
21. Nearest Railway Station	..	Embakasi, 3 N.M.
22. Nearest Railway Siding	.. ..	On Airport.
23. Cargo Handling Facilities	..	Forklift (3,000 lb.) with crane attachment, electric trollies, trailers.
24. Fuel Grades	.. ..	80/87, 100/130, 115/145 Octane, Aviation Turbine Fuel.
25. Oil Grades	.. ..	Full Range.
26. Hangar Space	.. ..	Nil for visiting aircraft.
27. Repair Facilities normally available	.. ..	To engine change standard.
28. Crash Equipment	.. ..	Three tenders (totalling 1,800 gallons water, 300 gallons foam compound, 700 lb. carbon dioxide), two water replenishment units (totalling 1,000 gallons), two initial rescue tenders (115 lb. carbon dioxide) with power saw. One ambulance.

GENERAL INFORMATION

29. Day Markings Obstruction, taxiway, taxi-holding position, runway designation, runway threshold, runway centre line, runway side line, signal area, wind direction indicator, landing direction indicator.
30. Local Flying Restrictions .. (a) Await signal from Marshal before entering or moving on Apron.
 (b) Special rules apply to flights within 3 N.M. of and less than 2,000 feet above the Airport.
 (c) Right-hand circuit. Whenever possible, pilots should arrange flights so that they can be cleared to land without making a circuit.
 (d) Use under IFR governed by regulations applicable to Nairobi CTR.
31. Runway 06 (a) Take-off run: 10,000 feet.
 (b) Stopway: 600 feet.
 (c) Accelerate stop distance: 10,600 feet.
 (d) Clearway: 1,400 feet.
 (e) Take-off distance: 12,000 feet.
 (f) Landing distance: 10,000 feet.
 (g) Direction: 054° (T).
 (h) R/W dimensions: 10,000 x 150 feet.
 (i) Strip distance: 11,200 x 500 feet.
 (j) Surface: Asphalt.
 (k) Touchdown elevation: 5,327 feet.
 (l) Lead-in/Approach lights: Low intensity red-coded centre line, length 3,000 feet and three crossbars.
 (m) Threshold lights: Green.
 (n) Runway lights: Low intensity omnidirectional: amber filters on last 20 per cent of runway.
 (o) Angle of approach lights: No
 (p) Gradient: — 0.31 per cent.
 (q) Runway strength: LCN 100.
32. Runway 24 (a) Take-off run: 10,000 feet.
 (b) Stopway: 200 feet.
 (c) Accelerate stop distance: 10,200 feet.
 (d) Clearway: 800 feet.
 (e) Take-off distance: 11,000 feet.
 (f) Landing distance: 10,000 feet.
 (g) Direction: 234° (T).
 (h) R/W dimensions: 10,000 x 150 feet.

GENERAL INFORMATION

32. Runway 24—(Contd.) (i) Strip distance: 11,200 x 500 feet.
(j) Surface: Asphalt.
(k) Touchdown elevation: 5,296 feet.
(l) Lead-in/Approach: Low intensity red-coded centre line, length 1,600 feet.
(m) Threshold lights: Green.
(n) Runway lights: Low intensity omnidirectional, amber filters on last 20 per cent of runway.
(o) Angle of approach lights: No.
(p) Gradient: + 0.31 per cent.
(q) Runway strength: LCN 100.
33. Meteorological Data (a) Prevailing winds: N.E., October to March; S.E., May to July; E., April to August.
(b) Rainy seasons: March to May; Mid-October to mid-December.
(c) Mean max. temp. 78.70° F.
(d) Mean min. temp. 56.50° F.
(e) Mean annual pressure: 840.8 mbs.
(f) Met. Office on Aerodrome.
34. Seasonal Availability All year.
35. Taxiway Width: 75 feet.
Surface: Asphalt.
36. Apron (a) Dimensions: 1,100 x 900 feet.
(b) Surface: Asphalt with concrete hard-standings.
(c) Elevation: 5,311 feet. MER.
37. Aerodrome Beacon Alternating White/Green.
38. Compass Base No.
39. Safety Altitude within 25 N.M. 9,100 feet (FL. 95).
40. Obstruction within 4 N.M.—
Mast 32 ft. a.a.l. 5,359 ft. .. Mer. 4,000 feet from threshold R/W 06.
Mast 33 ft. a.a.l. 5,360 ft. .. Mer. 5,000 feet from threshold R/W 06.
Mast 30 ft. a.a.l. 5,342 ft. .. Mer. 530 feet from R/W centre line in signals square, 30 feet AGL.
Mast 30 ft. a.a.l. 5,304 ft. .. Mer. 2,100 feet from threshold R/W 24.
41. Aerodrome Obstruction Chart: Type "A" available.

LEGISLATION

The following list of Civil Aviation Legislation and Air Navigation Regulations is of particular interest to all users of the Nairobi Airport:—

- Aerodrome (Control of Obstructions) Ordinance, Kenya, 1948.
- Government Notice No. 1150 of 1953 (Declared Area Boundary).
- Government Notice No. 1149 of 1953 (Airport Boundary).
- The Aerodrome Regulation Ordinance, 1960.
- The Aerodromes (Nairobi Airport) Regulations, 1961.
- Air Services (Licensing) Regulations, 1957.
- Air Services (Licensing) (Delegation of Powers) Order, 1953.
- Air Services (Licensing) (Delegation of Powers) (Amendment) Order, 1959.
- Air Transport Licensing Advisory Board Order, 1957.
- Carriage by Air (Colonies, Protectorates and Trust Territories) Order, 1953.
- Carriage by Air (Non-International Carriage) (Colonies, Protectorates and Territories) Orders, 1953-55.
- Carriage by Air (Parties to Convention) Order, 1958.
- Civil Aviation (Charges for Air Navigation Services) Act, 1957.
- Civil Aviation (Charges for Air Navigation Services) Regulations, 1957.
- Civil Aviation (Charges for Air Navigation Services) (Amendment) Regulations, 1958.
- Civil Aviation (Charges for Air Navigation Services) (Amendment) Regulations, 1960.
- Civil Aviation (Charges for Air Navigation Services) (Amendment No. 2) Regulations, 1960.
- Civil Aviation (Investigation of Accidents) Regulations, 1954-59.
- Colonial Air Navigation Order, 1961.
- Colonial Civil Aviation (Application of Act) Orders, 1952-61.
- Colonial Air Navigation (Exercise of Powers) (Colony and Protectorate of Kenya) Order, 1957.
- East African Air Advisory Council Orders, 1953-59.
- East African (High Commission) Orders in Council 1947-60.
- East African Air Navigation (General) Regulations, 1954-56.
- East African Air Navigation (Radio) Regulations, 1953.
- East African Air Navigation (Radio) (Amendment) Regulations, 1960.
- East African Territories (Air Transport) Orders in Council, 1945-58.
- Use of Government Aerodromes (Kenya) 1961, Legal Notice No. 462.
- The Immigration Ordinance, 1956
- The Immigration Regulations, 1957.
- The Customs Management Act, 1952.
- The East African Customs Regulations, 1954.
- The Statistics (Air Traffic) Regulations, 1959.
- International Sanitary Regulations, 1957.
- Public Health (Port, Airport and Frontier Health Rules), 1959.

RADIO FACILITIES AND NAVIGATIONAL AIDS

1. Facility VHF/RTF.
 General Description Very High Frequency communications. Cannot achieve long ranges, but ideal for short-range precision working; only needs low power and small aerials. Not affected by static, but suffers from interference from electrical machinery and is easily reflected by hills and buildings and, at centimetric wavelengths by rain.
- Station Nairobi Aerodrome Control.
 Call Sign Nairobi Tower.
 Transmit Frequency 118.1 Mc/s.
 Receiving Frequency 118.1 Mc/s.
 Hours of Operation H 24.
2. Facility VDF.
 General Description Very High Frequency direction finding. A system enabling aircraft to obtain navigational direction from the ground and for ground stations to obtain bearings taken on a transmission made by an aircraft. Capable of bearings with a high degree of accuracy.
- Station Nairobi Aerodrome Control.
 Call Sign Nairobi Homer.
 Transmit Frequencies 118.1 Mc/s. and 119.7 Mc/s.
 Receiving Frequencies 118.1 Mc/s. and 119.7 Mc/s.
 Hours of Operation H 24.
 Co-ordinates 012000 S. 365421 E.
 Direction and Distance to Airport 057° (M.) 1.5 NM.
3. Facility Locator Beacon.
 General Description A non-directional low power medium frequency navigational beacon used in conjunction with an aircraft's automatic Direction Finder to enable the pilot to locate the runway during periods of poor visibility. Used also by Air Traffic Control as a holding point for aircraft during periods of peak traffic.
- Call Sign NO and NI.
 Transmit Frequencies 273 Mc/s and 283 Mc/s.
 Hours of Operation H 24.

RADIO FACILITIES AND NAVIGATIONAL AIDS

Co-ordinates	012154 S. 365145 E. 011948 S. 365437 E.
Direction and Distance to Air- port	057° (M.) 4.7 NM. 057° (M.) 1.1 NM.
4. Facility	DME.
General Description	Distance Measuring equipment. A secondary radar system requiring an airborne radar transmitter and receiver, and a ground responder beacon, which enables an aircraft to "home" on to and orbit over the ground beacon and measure range and gives the pilot metered presentation of his distance from the Airport. Range, up to about 200 miles, dependent upon the height of the aircraft.
Call Sign	ND.
Transmit Frequency	230 Mc/s.
Receiving Frequency	218 Mc/s.
Hours of Operation	H 24.
Co-ordinates	012005 S. 365413 E.
Direction and Distance to Air- port	057° (M.) 1.6 NM.
5. Facility	I.L.S.
Type	Pye PTC 1100.
General Description	An Instrument Landing System which is aircraft operated and provides steering and descent information to enable the aircraft to carry out a descent through cloud to a height of about 150 feet above aerodrome elevation.
Glide Slope Angle	3°.
Call Sign	Localiser NL.
Frequency	Localiser 335 Mc/s. Glide Path 110 Mc/s. Middle and Outer Markers 75 Mc/s.
Hours of Operation	H 24.
Co-ordinates	Localiser 011804 S. 365653 E. Glide Path 011940 S. 365507 E. Middle Marker 011948 S. 365437 E. Outer Marker 012154 S. 365145 E.

RADIO FACILITIES AND NAVIGATIONAL AIDS

6. Facility	V.O.R.
General Description	Very High Frequency Omnidirectional Radio Range. A radio fixing aid in which a ground beacon transmits a continuous radio wave providing an infinite number of paths through 360°. The signal is detected by an omnibearing indicator showing the relative bearing of the ground beacon.
Call Sign	NV.
Transmit Frequency	112.5 Mc/s.
Hours of Operation	HS and O/R H 24.
Co-ordinates	011751 S. 365718 E.
Direction and Distance to Threshold, R/W 06	237° (M.) 18,100 feet.
7. Facility	VHF/RTF.
Station	Nairobi Approach Control.
Call Sign	Nairobi Approach.
Transmit Frequency	119.7 Mc/s.
Receiving Frequency	119.7 Mc/s.
Hours of Operation	H 24.
8. Facility	Surveillance Radar.
Type	Cossor CR 787.
General Description	Operated by Air Traffic Control for surveillance of air traffic to a maximum range of 90/100 NM on large high-flying aircraft, and in carrying out PPI approaches.
Frequency	Between 2940 Mc/s and 2980 Mc/s (10 CM).
Peak Power Output	450 Kw.
Location	011821 S. 365529 E. (Control Tower).
9. Facility	Decca Radar. Type 41. Storm Warning Radar.
General Description	Allows forecasts to be made by assessing the actual movements of areas of rain. Range can be varied from 10 to 250 miles.
Frequency	3 centimetres.
Location	010900 S. 365500 E. (Water Tower).

