# **VOLUME 3**

# SECTION 10

# WIRELESS TELECOMMUNICATION



Managed by Spectrum Management Authority 2nd Floor VMBS Building 53 Knutsford Boulevard Kingston5

### TABLE OF CONTENT

HAPTER I	I
ACKGROUND	
HAPTER 2	3
OW TO APPLY	
HAPTER 3	4
andards	
HAPTER 4	5
YPE APPROVAL CERTIFICATION	
PPENDICES	

1

Volume 3, Section 10

### **CHAPTER I**

### BACKGROUND

### I.0 ROLE OF THE SPECTRUM MANAGEMENT AUTHORITY

The Spectrum Management Authority (SMA) was established by the Telecommunications Act, 2000 with the specific mandate to ensure the efficient management of Jamaica's Radio Frequency (RF) Spectrum and Orbital Locations. The SMA is the sole organisation with the authority to:

- allocate frequency spectrum,
- assign radio frequency to operators, and
- license the use of frequencies by various radio frequency devices.

SMA's management of the spectrum entails:

- Managing access to the radio frequency spectrum through band planning, frequency assignment and licensing.
- Monitoring compliance with licensing agreements to protect all legal spectrum users.
- Identifying, investigating and assisting in resolving interference problems.
- Identifying and eliminating illegal use of the spectrum.
- Representing Jamaica's interests in spectrum related matters internationally.

### I.I LICENCES ISSUED BY THE SMA

Operators are prohibited from using radio frequency devices without first obtaining authorization in the form of a licence, from the SMA.

Spectrum Licences are issued for the following operations:

- Aircraft station
- Ship station
- Fixed wireless
- VSAT
- Earth station for international gateway
- Cellular radio systems
- Paging service
- Radio Relay service
- Citizens band
- Alien Amateur Permits
- Private Radio Stations: emergency and security services, amateur radio operators.

Non-spectrum Certifications are issued for:

- Radio Technicians
- Ship radio operators
- Type Approvals

### CHAPTER2

### HOW TO APPLY

### **2.0 APPLICATION FORMS**

Permission to operate radio devices can be obtained by submitting an application to the SMA on prescribed forms. Devices that do not require a licence must first obtain Type Approval Certification from the SMA. Information on the requirements to obtain Type Approval certification is at Appendix I. Samples of forms are attached as Appendices 1-15

Application forms and information in relation to spectrum licences and non-spectrum certifications may be obtained from the SMA offices or downloaded from the Authority's web-site - www.sma.gov.jm.

### 2.1 FEES

### **2.I.I Spectrum Licence Fees**

Spectrum Licence fees are paid annually to the Authority for the use of the frequency bands and are calculated pursuant to Regulations under the Radio and Telegraph Control Act. These fees are remitted to the Consolidated Fund.

### 2.1.2 Spectrum Regulatory Fees

Regulatory fees are calculated on an annual basis in order to cover the reasonable operating costs incurred by the Authority in relation to spectrum licences.

### 2.1.3 **Processing Fees**

Processing fees are to be charged in relation to each spectrum application. Processing fees are non-refundable

Information on current fees charged by the SMA is at Appendix 9. This information can also be obtained from the SMA offices or downloaded from the Authority's website at www.sma.gov.jm.

WIRELESS TELECOMMUNICATION

### **CHAPTER 3**

### **STANDARDS**

### 3.0

The SMA is guided by standards obtained from international standards organizations, viz., the International Telecommunications Union (ITU), Federal Communications Commission (FCC), American National Standards Institute (ANSI), European Telecommunication Standards Institute (ETSI), Institute of Electrical and Electronic Engineers (IEEE). In addition, local legislation and Regulations are used as regulatory tools in the day-to-day management process.

Local Legislations include:

- Telecommunications Act 2000.
- Radio and Telegraph Control Act 1973.
- Broadcasting and Radio Re-Diffusion Act.

### **CHAPTER 4**

### TYPE APPROVAL CERTIFICATION

### 4.0 WHAT IS TYPE APPROVAL CERTIFICATION AND WHY IS IT REQUIRED?

Type approval of radio communication equipment is the authorization of equipment which has never been granted a licence for manufacturing or importation, by verifying the compliance of the equipment against the standards which have been adopted by the SMA Administration. It ensures that the equipment from various manufacturers conform to appropriate standards and principles of product safety and will not interfere with other equipment or networks.

It is mandatory to obtain type approval for any radio equipment intended for use in Jamaica.

### 4.1 WHAT TYPES OF EQUIPMENT REQUIRE TYPE APPROVAL CERTIFICATION?

Radio communication equipment used in land (fixed and mobile), maritime mobile, aeronautical mobile and amateur services requires type approval.

### 4.2 **S**TANDARDS

Type approval for Radio Communication equipment in Jamaica is done by recognition of type approval test reports which are prepared according to international standards. In-country testing is not required.

### 4.2.1 Radio Standard:

Jamaica recognises the international standards set by the following bodies:

- FCC: Federal Communications Commission (USA)
- ANSI: American National Standards Institute
- ETSI: European Telecommunications Standardisation Institute
- ITU: International Telecommunications Union

### 4.2.2 Electromagnetic Compatibility (EMC) Standard:

Radio communication equipment should have EMC standard in accordance with international standards.

### 4.2.3 Electrical Safety Standard:

Radio communication equipment should have Electrical Safety standard in accordance with international standards.

### 4.3 **PROCEDURE FOR CERTIFICATION**

Applications are accepted from:

- i Manufacturer of equipment or authorized institution.
- ii An individual user for a specific piece of equipment.

Written applications from an individual or company should be sent to:

Spectrum Management Authority 2nd Floor VMBS Building 53 Knutsford Boulevard Jamaica, W.I. Tel: 876 929 8550 Fax: 876 960 8981

## Application forms are downloadable from the Authority's website at www.sma.gov.jm

- Provide the required technical information/documentation
- SMA will acknowledge receipt of application within two (2) working days.
- SMA will review application and request additional documentation if required.
- SMA will issue Type Approval Certificate with Type Approval ID number.

### 4.4 DOCUMENTATION/INFORMATION AND OTHER REQUIREMENTS

The following information and supporting documentation are required to begin processing the application for certification.

- i Name/Address of Manufacturer
- ii Authorisation from Manufacturer (in case where applicant is an authorised institution)

- iii Equipment Specification name, type, frequency bands, output power
- iv FCC or other Standards Body Certification
- v Electromagnetic Compatibility (EMC) Report
- vi Safety Report (optional)
- vii Commissioning Report.
- viii User Manual
- ix Country of Origin verification

### 4.5 LABELLING/MARKING REQUIREMENTS

Labelling/marking is the process of specifying a registration number on the radio communication equipment which is made or imported into the country. This is an optional requirement.

### 4.6 **APPLICABLE FEE**

The fee for Type Approval Certification is US\$250.00 per model. This is payable to the:

Spectrum Management Authority 2nd Floor VMBS Building 53 Knutsford Boulevard Kingston 5 Jamaica W.I.

### 4.7 **PROCESSING TIME**

The Certificate will be processed and dispatched within 15 business days after receipt of all documentation.

### 4.8 TERMS AND CONDITIONS OF CERTIFICATION

- The certificate is valid under condition that the equipment being granted approval is identical to the type tested one.
- Any changes to the name or model of the type approved

7

equipment will require a new type approval. This involves reapplication with revised supporting documents. If the technical specifications have not been amended, reference can be made to original type approval. However, the applicant must submit a letter of declaration stating that the technical specifications for the old named/model equipment is the same as the new name/model equipment.

• The Certificate may be revoked if holders use it beyond approved scope or if it is determined to have been obtained illegally.

### 4.9 OTHER LICENSING REQUIREMENTS

Applicants may be required to obtain other licences to make, import or install radio communication equipment depending on the regulation governing such equipment.

Declaration: All information presented to the SMA will be treated as confidential and will not be disclosed to third parties.

### 4.10 CONTACT INFORMATION

For further information please contact:

Spectrum Management Authority 2nd Floor VMBS Building 53 Knutsford Boulevard Kingston 5 Jamaica, W.I. Telephone: (876) 929-8550/929-8520 Fax: (876) 960-8981 Web-site: www.sma.gov.jm

WIRELESS TELECOMMUNICATION

### Appendix I



### TELECOMMUNICATIONS ACT

### Application for Citizens Band Radio Station Licence

### PLEASE TYPE OR PRINT

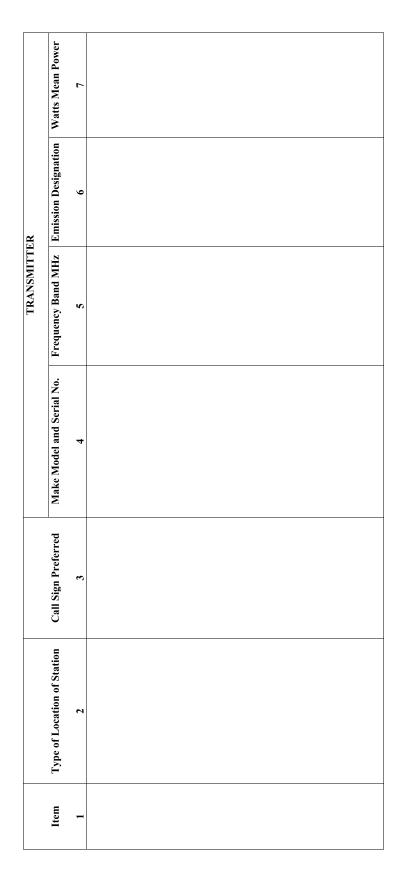
1.	Name of Applicant		
2.	Address		
3.	TelephoneE-mail		
4.	Nationality		
5.	Date of Birth		
6.	Occupation or Nature of Business		
7.	Location of Base Station(s) sited within two miles radius of an aerodrome		
8.	Number of base stations		
9.	<ol> <li>Number of mobile stations</li> </ol>		
10.	Who will use the Citizens Band Radio Service:		
	Individual Family Business Enterprise Others (please specify)		
11.	11. Purpose of Application:		
	New Licence Additional Licence Amendment/Substitute		
If /	Additional Licence or Amendment/Substitute, please indicate current licence numbers		
Sig	gnature of Applicant		
 Da	te		
SM	A-005 Last modified: 29/05/2006		

Spectrum Management Authority, 53 Knutsford Boulevard, 2<sup>nd</sup> Floor VMBS Building, Kingston 5 Tel#s: (876) 929-8550/8520

Wireless Telecommunications.qxp 01/05/2007 12:05 PM Page ii

### Appendix I

ii



 $\oplus$ 

# SCHEDULE TO APPLICATION FOR CITIZENS BAND RADIO STATION LICENCE

### Appendix 2

•	.::ŝ	pectrum	
		AUTHORITY	
	• •	•	

### THE TELECOMMUNICATIONS ACT

Application for Maritime Mobile Radio Station Licence

PLEASE TYPE OR I	PRINT
1.Name of	Applicant
2. Address of	of Applicant
3. Nature of	Business
4. Registere	d Office Address
5. Nationali	ty of Applicant
6.Proposed	date for start of operations
7. Class of s	station. Please tick appropriate box.
	Coast 2Category or Classification
:	Ship 3Category or Classification
8.Class/Typ	pe of Radio Operator's Certificate(s) held by Radio Operator(s)
9. To be c	ompleted in case of Coast Station only
i) .	Address of transmitter site
	Address of control point
	(if different from above):
iii) (	Geographical co-ordinates of transmitter site
iv) 🗄	Name of transmitting station
<b>v</b> ) 1	Nature of service (please tick appropriate box)
	Public correspondence
	Port operations
	Ship movement
	Emergency (i.e. Distress, Urgency & Safety)
	Other Please specify
SMA 000	I act modified: 20/05/2006

Spectrum Management Authority, 53 Knutsford Boulevard,  $2^{\rm nd}$  Floor VMBS Bldg., Kingston 5 Tel#s: (876)929-8550/8520

### Appendix 2

### 10. To be completed in case of ship station only

i)	Name of vessel	
ii)	Flag signal	
iii)	Type of vessel. Please tick appropriate box.Passenger-foreign going including home tradePassenger-coastalCargo-foreign going including home tradeTanker-foreign going including home tradeTanker-coastalTugYachtFishing:Fishing:length	
iv)	Gross maximum registered tonnage	
v)	Registered owner: Name: Address: Nationality:	
vi)	Port of registryOfficial Reg. No.	
vii)	Port where radio installation may be inspected:	
viii)	Call sign preferred:	
ix)	Technical particulars of reserve power supply :	
of Au	thorised	

Name of Authorised Company Representative:	
Title:	
Signature:	Date:

### <u>Notes</u> 1.

2.

Where the Applicant is a Registered Company, a list of the names of the Directors and authorised Officer together with their addresses and nationalities should accompany the Application. If Application is for a Private Ship Station Licence, the word "Commercial" or "Non-commercial" must be entered in the "category or classification" line.

 $\oplus$ 

### WIRELESS TELECOMMUNICATION

### Appendix 2

EquipmentMake or ManufacturerTransmittersTransmittersShip's Emergency TransmittersSurvival Craft TransmittersRadarPrection FinderDirection Finder	or Model or Type						
Transmitters		Power (watts)	Emission Designation	Desired Frequency	Coast Station in T	Coast Station in Transmitting Antenna only	only
Transmitters	-		I	Bands/assigned Frequency	Azimuth of Maximum Radiation	Angular Width of Radiation Main Lobe	Antenna Gain
Ship's Emergency Transmitters Survival Craft Transmitters Radar Direction Finder							
Survival Craft Transmitters Radar Direction Finder							
Radar Direction Finder							
Direction Finder							
Auto Alarm Radio-telegraph							
Other							

WIRELESS TELECOMMUNICATION

Appendix 3



### APPLICATION FOR EARTH STATION (VSAT)

The following must be submitted with the completed Application Form:

- 1. A letter stating the nature of business of the Applicant and the specific purpose(s) for which the VSAT Earth Station is required.
- 2. A copy of the Company's Registration Certificate
- 3. A copy of the Company's Articles of Association
- 4. A letter from the Satellite Company indicating its intent to enter into an agreement with the Applicant, the assigned frequencies, and the station to be communicated with, in respect of proposed service.
- 5. A copy of the manufacturer's technical specification for the transmitter, receiver and antenna.
- 6. A letter from the Applicant's technical representative accepting responsibility for the planning and maintenance of the station.
- 7. Certificate confirming that the Applicant has been granted Free Trade Zone status.
- 8. Processing Fee of J\$25,000
- 9. a copy of the Company's Domestic Carrier licence, International (Voice/Data) Carrier Licence and International (Voice/Domestic) Service Provider (issued by the OUR)

Upon grant of licence: Spectrum Fee of J\$500,000.00 Regulatory Fee of \$350,000.00

i

WIRELESS TELECOMMUNICATION

Appendix 3

Spectrum Management AUTHORITY

### APPLICATION FOR EARTH STATION LICENCE

### PLEASE TYPE/PRINT

Name of Applicant:
Address:
Nature of Business
Telephone No
Type of Service:
Name and Address of Satellite Provider:

### **Earth Station Receiving Characteristics**

Make a	and Mo	del:
1.	Assign	ed frequencies (Downlink):
2.	Assign	ed frequency band:
3.	Date of bringing into use:	
	a) Location of station:	
	b)	Country:
	c)	Geographic coordinates:
4.	Class o	of emission:
5.	a)	Antenna size:
	b)	Antenna gain:
	c)	Receive G/T:
	d)	Elevation Angle:
6.	Azimut	h:

### WIRELESS TELECOMMUNICATION

### Appendix 3

SMA-007	Last modified: 2005 February 16	
7.	Altitude (a.m.s.l):	
8.	Polarization:	
9.	Receive Noise Temperature	
10.	Regular Hours of Operation:	
11.	Maintenance of System:	
<u>Earth</u>	Station Transmitting Characteristics	
Make a	nd Model:	
1.	Assigned frequencies (uplink):	
2.	Assigned frequency band:	
3.	Proposed date of bringing into use:	
4.	Transmitter Powera)Transmitter Power (saturated):	
	b) Maximum Radiated Power:	
5.	Antenna Gain:	
6.	Polarization:	
7.	Modulatio n	
	a) Modulation (FDM-FM)	
	b) Modulation (TV):	
	c) Modulation (other):	
8.	Regular hours of operation:	
9.	Operating Satellite:	
10.	Name of Receiving Earth Station	
11.	Location of Receiving Earth Station	
	Name of Authorized Co. Representative:	
	Title:	
	Signature:	

### WIRELESS TELECOMMUNICATION

### Appendix 4



### The Telecommunications Act, 2000

### Application for Alien Amateur Radio Station Permit

### PLEASE TYPE OR PRINT

1.	Name:	
2.	Nationality:	
3.	Permanent address in home country:	
4.	Place of Birth:	
	Date of Birth:	
5.	Present Occupation:	
	Name of Employer:	
	Address of Employer:	
6.	Expected date of arrival in Jamaica:	
	Projected date of departure from Jamaica:	
7.	Address while in Jamaica:	
8.	Passport or travel document number:	
	Place where issued:	
	Date of issue:	
	Date of expiration:	
9.	Amateur Radio Station Licence Number:	
	Date of issue	Date of expiration:
	Call Sign:	

### Signature: ...... Date: .....

### **NOTES**

- 1. Where no passport is available, proof of identity is required. This is an essential requirement.
- 2. If normally domiciled in a country other than that for which citizenship is claimed, a valid passport must be produced as proof of citizenship.
- 3. If self-employed, please state name of company under which trade or profession is carried on, if other than your own.
- 4. A photocopy of the Amateur Radio Station Licence held must be forwarded with this application.
- 5. If your amateur station is to be operated at any place in Jamaica other than at the address given for period exceeding 48 hours, an itinerary showing projected places and dates must be given.

WIRELESS TELECOMMUNICATION

Appendix 5



### RADIO AND TELEGRAPH CONTROL ACT

### Application for Amateur Radio Station Licence

Name of Applicant:	
Address:	
Contact Number:	
Nature of Business/Profession:	
Nationality:	
Date of Birth:	
Radio Operator's Certificate Held:	
Class of Station Licence applied for:	
Class of Station Licence previously held:	
Proposed location of Station:	

WIRELESS TELECOMMUNICATION

Appendix 5

Please attach a copy of your recorded transmission over the last 12 consecutive months. (Class A Applicants only)

Signature of Applicant:

Date: .....

WIRELESS TELECOMMUNICATION

Appendix 6



### APPLICATION FOR A LICENCE TO ESTABLISH AND MAINTAIN AN AERONAUTICAL GROUND STATION

	PLEASE TYPE OR PRINT
Name of Applicant:	
Address:	
Nature of Business:	
Name and Location of station:	
Give longitude and latitude in degrees	
and minute:	
<b>Operating Frequency:</b>	
Class of Emission:	
Make and Model No. of Transmitter:	
Power Output:	
Name of Authorised Company Representati	ve:
Title:	
Signature:	Date

# SCHEDULE TO APPLICATION FOR SPECTRUM LICENCE

	Directivity	
Antenna	Polarization & Gain	
	Height Above Ground	
	Mean Power Watts	
ġ	Emission Designation	
Transmitter	Frequency MHz	
	Make & Model	
Call Sign Preferred		
Type and Location of Station		
ltem		

 $\oplus$ 

¢

Volume 3, Section 10

Appendix 7

29/05/2006

Volume 3, Section 10 WIRELESS TELECOMMUNICATION
Appendix 7
Spectrum Management Authority SMA APPLICANT VETTING/ADDRESS VERIFICATION FORM (VINDLY PRINT WHEN COMPLETING)
(KINDLY PRINT WHEN COMPLETING)
Name of Entity:
Applicant:
Surname: Middle Initial:
Telephone Number:
Date of Birth: M Y
Place of Birth:
Parish & District:
Permanent Home Address:
Temporary Home Address:
Name of Spouse:
Address of Spouse:
National I.D. or TRN No:
Frequency requested:

### FOR SMA ENFORCEMENT USE ONLY

NAME OF VERIFICATION OFFICER:

DATE: .....

-

### PROCESSED BY: RTC003

This application has been vetted and approved by the SMA Enforcement Division	<b>DECLARATION</b> I the undersigned hereby declare that the information given on this form is true.
Place Signature, Date and Stamp of authorised SMA officer	Sign Name (PRINT) Date

### SPECTRUM MANAGEMENT AUTHORITY - AN AGENCY OF THE GOVERNMENT OF JAMAICA

WIRELESS TELECOMMUNICATION

Appendix 8

i

Spectrum Management Authority Application for Type Approval of Radiocommunication Equipment

Date of Application:

Part 1. Applicant Information

Jame of Applicant
Address:
On behalf of (if applicant is an authorized institution):
elephone no:
Cacsimile no:
-mail address:

### Part 2. Attached Documents and Equipment

Technical Specifications of Equipment A copy of the test report or certification of the technical characteristics of the radio communication equipment, issued by a recognized test or certification body. Name of test or certification institution..... ..... Country ..... A copy of accreditation certificate of test or certification body **EMC Report** Safety Report **Commissioning Report** User Manual (may be optional if test procedure outlines the operations of the equipment) Letter of Authorization (if applicant is an Authorized institution). A physical sample of the equipment requiring type approval Others (please state) .....

Processing fee of US\$250.00 per model for type approval certification

### WIRELESS TELECOMMUNICATION

### Appendix 8

### Part 3 Radio communication Equipment Information

3.1	Equipment:	3.2 Type:	
3.3	Brand Name:	3.4 Model:	
3.5	Manufacturer:	3.6 Country	
3.7	Frequency Band Transmi	t:	MHz
	Receive		MHz
3.8	ITU Emission Designator		
3.9	Proposed use of Equipment		

I hereby certify that all information provided above and the document attached hereto are true and correct, and I shall comply with the policies and procedures on Type Approval Certification of Radio equipment and any regulation or order relevant to radio communication equipment in Jamaica.

Name (in block	capitals)
	Applicant/ Authorized person
Signature	
Desition	
Position	
Date	

All information presented to the SMA will be treated as confidential.

For Spectrum Ma	nagement A	Authorit	y use only	
Applicant code:		•••••		
Application Approved:				
Date of Approval:		•••••		
Type Approval ID Number:		•••••		
Date sent to client:		•••••		
Payment received:		•••••		
Signature of Certifying Office	r:	•••••		

Shaping Your Future With Wireless

WIRELESS TELECOMMUNICATION

Appendix 9



### APPLICATION FOR A CERTIFICATE OF COMPETENCE IN RADIO-TELEPHONY – SECTION II MERCHANT SHIPPING (WIRELESS TELEGRAPHY) (COSTAL VESSELS) REGULATIONS, 1958

### PLEASE TYPE OR PRINT

1. Particulars
Name of Applicant:
Address:
Telephone:
Date of Birth: Place of Birth:
Nationality:
2. Personal Description
Profession or Occupation:
Height: Colour of Eyes:
Colour of Hair: Complexion:
Special Peculiarities:
3. Photographs
Two copies of a recent photograph of the applicant must be included with the application. These must be taken full face without hat and must not be mounted. The size must not be more than 2 ½ inches by 2 inches or less than 2 inches by 1 ½ inches. The photograph must be certified by any Resident Magistrate, Justice of the Peace, Minister of Religion, Collector of Taxes, Clerk of the Courts, Police Officer (Gazetted Rank), Bank Manager, Medical Practitioner, Solicitor of the Supreme Court or Barrister-at-Law who is a Commonwealth Citizen, ordinarily resident in Jamaica.
The person who certifies the photograph is required to endorse the reverse side of one copy with the words "I certify that this is a true photograph of the applicant (Mr./Mrs./Miss)" and add his signature.
All photographs included with an application become the property of the Postmaster General when it is lodged.
4. Qualifications
Details of Operating Certificate in Radiotelephony or Radiotelegraphy now held by Applicant must be submitted with completed Application.
Applicant's Signature: Date:

WIRELESS TELECOMMUNICATION

Appendix 10



### PLEASE TYPE OR PRINT

TH	IE RADIO TELEGRAPH CONTROL ACT (Cap. 378)
	Application for Radio Technician's Licence
Name of Applicant:	
Address:	
Date of Birth:	
Nationality:	
Radio Operator's & Other Certificates Held:	
Class of Licence Applied For:	Class A
Please tick appropriate box.	Class B
Licence Fee: \$1,200 - C \$1,000 - C	lass A lass B (The Licence Fee should be forwarded with Application)
Applicant's Signature:	
Date:	

 $\oplus$ 

# APPLICATION FOR A LICENCE TO ESTABLISH AN AIRCRAFT WIRELESS TRANSMITTING STATION

Call Sign

	PLEASE TY	PLEASE TYPE OR PRINT	6Y-J
1. Name of Company		Nature of Business	
<ol><li>Call Sign (nationality) and Registration marks.</li></ol>		9. Nature of wireless service (insert appropriate indicator SN, CP or CR as	
Name of Aircraft (if any).		accored below.	
3. Make and type of aircraft		10. Aircraft charge per word in centimes of the Gold Franc (normal charge 40 cents). <i>See Note 1 below</i> .	
4. Customary route (or home Airport)		11. Name and address of Company to which Radiotelegram Accounts must be sent. <i>See Note I below.</i>	
Make and type of wireless transmitters or combined transmitter/receiver (including all auxillary transmitters, eg. Radio altimeters, radar).		12. Name and address (Registered Office if a Limited Company) of the Registered owner of the Aircraft.	
Maximum power input to aerial (in watts) of each type of transmitter listed under item 5.		<ol> <li>Name and address of the Company operating the Aircraft (if not operated by the owner).</li> </ol>	
7. Transmitting frequencies and types of emission required for use by the Aircraft	See note General (5) on page 2 and insert appropriate indication .		
Communications restricted to messages respecting the safety, or Paid radiotelegram service to and from the aircraft, and messag Paid radiotelegram service from aircraft to ground only, and me Applicable only when paid radiotelegram service is authorised.	Communications restricted to messages respecting the safety, operation or navigation of the aircraft. Paid radiotelegram service to and from the aircraft, and messages respecting the safety, operation or navigation of the aircraft. Paid radiotelegram service from aircraft to ground only, and messages respecting the safety, operation or navigation of the aircraft. Applicable only when paid radiotelegram service is authorised.	ft. r navigation of the aircraft. cion or navigation of the aircraft.	

 $\oplus$ 

Volume 3, Section 10

Appendix 11

### WIRELESS TELECOMMUNICATION

### Appendix II

CIES AND TYPES OF EMISSION	FREQUENCY BANDS	1. Frequencies in the Civil Aeronautical Mobile Bands between 2850 and 22000 kc/s.	2. Frequencies in the Band 118 to 136 Mc/s.	3. Miscellaneous	a) 500 kc/s - International Distress and Calling Frequency (telegraphy)	b) 2182 kc/s - Int'l Distress and Calling Frequency (radiotelephony)	c) 8364 kc/s - Survival Craft Frequencies	d) 121.5 Mc/s - Aeronautical Emergency Frequency (World-wide)	4. Public Correspondence Service:	4182 kc/s, 6273 kc/s, 8364 kc/s, 12546 kc/s, 16728 kc/s, 22245 kc/s	The Managing Director Spectrum Management Authority 2 <sup>204</sup> El.cov. VMBS Bauildino.	55 Kuttsford Boulevard	C HUBSHOLD	Application is hereby made for a wireless transmitting licence for the aircraft 6Y-J	Name of authorised Company Representative	Title Address	Signature Date Date
NOTES REGARDING FREQUENCIES AND TYPES OF EMISSION	GENERAL	<ol> <li>Transmitting frequencies authorised for use by civil aircraft are normally selected from the frequency hands energified below. Certain other frequencies are also calerted from frequency bands above 136.</li> </ol>	ound spectrue occore. Comments the inspectres are also selected non negaciney ounds above 150 MC/s, mainly for radio navigation purposes.	2. The precise frequencies and types of emission so authorised in respect of the main radio facilities are		<ol> <li>Regarding frequencies in use in other countries, similar information to that outlined above and any relative instructions are usually promulgated by the responsible authorities of those countries.</li> </ol>	Jamacan registered ancian may interciore durinse such frequencies, as appropriate, without me prior permission of the Jamaican authorities.	4. Operators of Jamaican registered aircraft wishing to use transmitting frequencies not covered by the above operators of hour device of their recontenents by Inter accommension their	מסטיע מוומוקנותנווס אוסטטע קויע ועוו טעמווט טי ווועו ועקטורנווטנווס טיז געועו מעטווקטווז וווק טוטו application.	<ol> <li>Types of emission should be referred to by the following symbols:</li> <li>Continuous Wave Telegraphy</li> <li>A1</li> <li>Interrupted or Nodulated Continuous Wave Telegraphy</li> <li>A2</li> <li>Radiotelephon</li> <li>P</li> </ol>	tequirements	1. The Licence Fee of \$25,000.00 should be forwarded with the application.	2. Processing fee of \$2,500.00 should accompany application.	<ol> <li>A letter from the Civil Aviation Authority confirming that the aircraft is legally registered in Jamaica, make &amp; model of aircraft and has been assigned the relevant marking i.e. 6y-J</li> </ol>			

Appendix 12

Volume 3, Section 10

### SCHEDULE OF FEES FOR OBTAINING SPECTRUM LICENCES AND CERTIFICATIONS

### Adopted from the Radio & Telegraph Control Act - Regulations 1998 CITIZEN BAND RADIO SERVICE

Fee payable	\$600
Annual Renewal	\$600
Substitute Licence	\$100

### **RADIO OPERATORS AND TECHNICIANS**

First Class Radio Telegraph Operator's Certificate	\$800
Second Class Radiotelegraph Operator's Certificate	\$600
Radiotelegraph Operator's Special Certificate	\$500
General Radiotelephone Certificate	
General Operator's Certificate (GMDSS)	\$1,000
Radio communication Operator's Special Certificate (Maritime)	\$700
Restricted radiotelephone Operator's Certificate	\$500
Amateur Radio Operator's Certificate Classes A,B,C	\$500

Radio Technicians Licence	
Class A	\$1,200
Class B	\$1,000
Radiotelegraph Operator's Certificate All classes	\$500
General radiotelephone Operator's Certificate	\$500
Radio communication Operator's Special Certificate (Maritime)	\$500
Restricted Radiotelephone Operator's Certificate	\$500
Amateur Radio Operator's Certificate Classes A,B,C	\$200
Radio Technician's Licence Classes A,B	\$200

### **SPECTRUM LICENCE**

### **Private Radio Station**

## Annual fee for transmitter(s) operating single frequency mode above 30 Mhz, but not exceeding 470 Mhz.

i) With mean power up to but not exceeding one watt	\$1,200
ii) With mean power not exceeding 100 watts	\$4,000
iii) With mean power exceeding 100 watts	\$7,500

### For two frequency (duplex not exceeding 470 MHz serving single Licensee.

i) with mean power up to but not exceeding 1 watt	\$ 7,500
ii) with mean power up to but not exceeding 100 watts	\$10,000
iii) with mean power exceeding 100 watts	\$15,000

Volume 3, Section 10 WIRELESS TELECOMMUNICATION Appendix 12 Radio paging transmitter at a site serving more than one organizations \$15,000 Frequency exceeding 470 Mhz, but less than 900 MHz, not including cellular radio and mobile trunking services in the 806-890 MHz band with bandwidth < 25 Khz i) with mean power up to but not exceeding one watt \$1,200 ii) with a mean power up to but not exceeding 100 watts. \$4.000 iii) with a mean power exceeding 100 watts. \$7,500 Two frequency duplex as above serving single Licensee. i) with a mean power up to but not exceeding one watt. \$ 7,500 ii) with a mean power up to but not exceeding 100 watts \$10.000 iii) with a mean power exceeding 100 watts \$15,000 For two frequencies serving multiple users in a community service mode i) with a mean power up to but not exceeding one watt. \$20,000 ii) with a mean power up to but not exceeding 100 watts. \$30.000 iii) with a mean power exceeding 100 watts \$50,000 For transmitters operating point to point microwave links - with bandwidth not exceeding 1000 kHz \$100,000 - with bandwidth not exceeding 5000 kHz \$200,000 - with bandwidth not exceeding 10,000 kHz \$500,000 - with bandwidth not exceeding 15,000 kHz \$700,000 - with bandwidth not exceeding 20,000 kHz \$850,000 - with bandwidth not exceeding 25,000 kHz \$1,000,000 - with bandwidth not exceeding 30,000 kHz \$1,200,000 - with bandwidth not exceeding 35,000 kHz \$1,400,000 - with bandwidth not exceeding 45,000 kHz \$1,600,000 - with bandwidth not exceeding 55,000 kHz \$1,800,000 - with bandwidth exceeding 55,000 kHz \$2,000,000 **OTHER SERVICES** - Non-commercial broadcast \$30,000 \$25.000 - Aeronautical Mobile (Aircraft) Station - Aeronautical Ground Station \$10,000 - Aeronautical Special Ground Station \$1,000,000 - Private Satellite Earth Station \$1,000,000 - VSAT \$500,000 - Short-term VSAT (3 months) \$65.000 - Maritime Mobile (4 years) **US\$280** 

- Short-term Maritime Mobile (3 months)

**US\$70** 

Appendix 12

### PROCESSING FEES FOR SPECTRUM LICENCES AND CERTIFICATIONS

Processing fees are to be charged in relation to each spectrum application as follows:

Private Radio Station	
1 relay	-\$ 2,000.00
2-3 relays	-\$ 5,000.00
4 and over relays	-\$10,000.00
VSAT/ Earth Station	-\$25,000.00
Aeronautical	-\$ 2,500.00
Alien Permits	- US\$10.00

Processing fees are also charged for each non-spectrum application as follows:

Type Approval Certification	- US\$250.00			
Ship Station Survey & Certification	-US\$150.00/hr			
Ship Station Inspection	- \$2,000.00			
Customs Clearance Authorization				
Detention Notice	- \$1,000.00			
Entry C-78	- \$2,000.00			

### Processing fees are non-refundable.

Processing fees are not applicable for renewals unless an amendment has been made to the service, in which case, it is treated as a new application.

Exceptions Amateur Radio Operators Maritime Mobile Operators Citizens Band Radio Operators All Security and Emergency Services All accredited tertiary institutions.

### Appendix 12

### **REGULATORY FEES**

Regulatory fees are calculated on an annual basis in order to cover the reasonable operating costs incurred by the Authority in relation to spectrum licences.

Regulatory fees are charged to existing licensees as follows:

Group 1 – These are holders of spectrum licences only, and would include Private Radio Stations. These individuals/companies will pay 35 per cent of spectrum licence fees.

Group 2 relates to holder of Carrier and/or Service Provider licences, and is further broken down into two categories.

Level 1 – All cellular companies - a proportion of the annual budget as determined by formula set out in The Telecommunications Act (Spectrum Regulatory Fees) Regulations 2003, Gazette No.33.

Group 2, Level 11 – All VSAT users and Commercial Data Service Providers will pay 70 per cent of spectrum licence fees.

### **Exemptions**

The following spectrum users are exempt from paying annual Regulatory fees: Jamaica Constabulary Force Jamaica Defense Force Jamaica Fire Brigade ODPEM Red Cross All Accredited Tertiary institutions All Amateur Radio Operators All Citizens Band Radio Operators

Regulatory fees for new licences issued during the year and temporary licences are charged on a pro-rata basis for the year.

All existing licensees who require new spectrum during the year are required to pay Regulatory fees in relation to the additional spectrum on a pro-rata basis.

WIRELESS TELECOMMUNICATION

### Appendix 12

V

For further information on spectrum licence fees and regulatory fees, please see the following documents:

- The Radio and Telegraph Control Act, Regulations 1998, (www.sma.gov.jm)
- The Telecommunications Act 2000 (www.sma.gov.jm)
- Financing the SMA, A Consultative document (www.sma.gov.jm)
- The Telecommunications Act (Spectrum Regulatory Fees) Regulations 2003, Gazette No. 33