

STATUTORY INSTRUMENTS

2019 No. ...

CIVIL AVIATION (AERONAUTICAL RADIO FREQUENCY SPECTRUM
UTILIZATION) REGULATIONS, 2019

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2019 No. ...

THE CIVIL AVIATION (AERONAUTICAL RADIO FREQUENCY SPECTRUM UTILIZATION) REGULATIONS, 2019

*(Made under sections 34(2) and 61 of the Civil Aviation Authority Act, Cap.
354)*

IN EXERCISE of the powers conferred upon the Minister by sections 34(2) and 61 of the Civil Aviation Act, Cap. 354, and on the recommendation of the Civil Aviation Authority, these Regulations are made this..... day of.....2019.

PART I- PRELIMINARY

1. Title

These Regulations may be cited as the Civil Aviation (Aeronautical Radio Frequency Spectrum Utilization) Regulations, 2019.

2. Interpretation

In these Regulations unless the context otherwise requires -

Air Navigation services(ANS)” means air traffic services, communication, navigation and surveillance and aeronautical information services;

“*Air Navigation services facility*” means any facility used, available for use, or designed for use in aid of navigation of aircraft, including airports, landing fields, any structures, mechanisms, lights, beacons, marks, communicating systems, or other instruments or devices used or useful as an aid to the safe taking off, navigation, and landing of aircraft and any combination of such facilities;

“*Air navigation services provider(ANSP)*” means an independent entity established for the purpose of operating and managing air navigation services and empowered to manage and use the revenues it generated to cover its costs;

“*Alternative means of communication*” means a means of communication provided with equal status, and in addition to the primary means;

“*Authority*” means the Uganda Civil Aviation Authority established under section 4 of the Civil Aviation Act 2019;

“*CNS*” means Communication, Navigation and Surveillance;

“*Double channel simplex*” means simplex using two frequency channels, one in each direction;

“*Duplex*” means a method in which telecommunication between two stations can take place in both directions simultaneously;

“*Frequency channel*” means a continuous portion of the frequency spectrum appropriate for a transmission utilizing a specified class of emission;

“*MANSOPs*” means Manual of Air Navigation Service Operations;

“*Offset frequency simplex*” means a variation of single channel simplex where telecommunication between two stations is effected by using in each direction frequencies that are intentionally slightly different but contained within a portion of the spectrum allotted for the operation;

“*Operational control communications*” means communications required for the exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of a flight;

“*Primary means of communication*” means the means of communication adopted normally by aircraft and ground stations as a first choice where alternative means of communication exist;

“*Simplex*” means a method in which telecommunication between two stations takes place in one direction at a time;

“*Single channel simplex*” means a simplex using the same frequency channel in each direction; and

“*VHF digital link (VDL)*” means a constituent mobile sub-network of the aeronautical telecommunication network (ATN), operating in the aeronautical mobile VHF frequency band. In addition, the VDL may provide non-ATN functions such as, for instance, digitized voice.

3. Application

These Regulations apply to a person who provides Communication, Navigation and Surveillance services within a designated air spaces and at aerodromes.

PART II- GENERAL REQUIREMENTS

4. Requirements for CNS facilities

The minimum requirements for installation, commissioning, operation and maintenance of the CNS facilities shall conform to these Regulations.

5. Certification of CNSP

A person who wishes to provide CNS service or operate a facility to support an air traffic service shall have an ANSP certificate issued in accordance with the ANS Regulations.

6. Approval requirement

- (1) A person shall not provide communication, navigation and surveillance systems or operate a communication, navigation and surveillance facility in a designated airspace and aerodromes unless the system or facility is approved by the authority.
- (2) The authority shall approve installation, use, decommissioning, upgrading or relocation of all the communication, navigation and surveillance facility or facilities in the designated airspace and aerodromes.

7. Inspections and audits

- (1) The authority shall carry out safety inspections and audits on CNS facilities, documents and records of the CNS facilities to determine compliance in accordance with these Regulations.
- (2) An inspector shall have unrestricted access to the facilities, installations, records and documents of the service provider.

8. Sitting and installation

- (1) The ANSP shall determine the site for installation of a new facility based on operational requirements, construction aspects and maintainability.
- (2) The facility referred to in sub-regulation (1) shall be installed by maintenance personnel who are qualified in air navigation facilities and who have knowledge of the operations, testing, and maintenance of the CNS facilities.

9. Commissioning requirement

- (1) A CNS facility shall be confirmed during commissioning and subsequent maintenance that the facility achieves and continues to meet the standard operating parameters and applicable figures recorded.
- (2) The ANSP shall establish procedures to ensure that each new facility is commissioned to meet the specifications for that facility and is in compliance with these Regulations.
- (3) The ANSP shall ensure that the system performance of the new facility is validated by all necessary tests.
- (4) The ANSP shall ensure that the procedures referred to in sub-regulation (2) include documentation of tests conducted on the facility prior to the commissioning, including those that test the compliance of the facility with the applicable standards and any flight check required in compliance with these Regulations.

10. Availability and reliability

- (1) The Authority shall monitor, review and report the performance of technical facilities against these Regulations.
- (2) The CNS provider shall provide protected power supply system, battery back-up, reliable connectivity and air conditioning.

11. Test equipment

- (1) A CNS provider shall ensure that appropriate tools and test equipment are available for personnel to maintain the operation of equipment.
- (2) A CNS provider shall establish a procedure to control, calibrate, and maintain all equipment required for its services.
- (3) The CNS provider shall ensure that the maintenance plan or the operating and maintenance instructions for each facility specifies the test equipment requirements for all levels of operation and maintenance undertaken.
- (4) The CNS provider shall use documented procedures to control, calibrate and maintain test equipment.

12. Record keeping

A CNS provider shall establish procedures to identify, collect, index, store, maintain, and dispose records relating to —

- (a) the performance and maintenance history of each facility;
- (b) the establishment of the periodic test programs for each facility;
- (c) each item of test equipment required for the measurement of critical performance parameters;
- (d) each reported or detected facility malfunction;
- (e) each internal quality assurance review; and
- (f) each person who is authorized to place facilities into operational service.

13. Documentation.

A CNS provider shall—

- (a) maintain and keep copies of relevant equipment manuals, technical standards, practices, instructions, maintenance procedures, site logbooks, and any other documentation that are necessary for the provision and operation of the facility.
- (b) have entries recording all occurrences and actions relating to operation, maintenance, modification, failure, faults, removal from and restoration to service in the log books.
- (c) establish a procedure for the control of the documentation required under paragraph (a).

14. Periodic inspection and testing

- (1) A CNS provider shall establish a procedure for the periodic inspection and testing of the communication, navigation and surveillance systems to verify that each facility meets the applicable operational requirements and performance specifications for that facility.
- (2) Periodic inspection shall include-
 - (a) security of the facility and site;

- (b) adherence to the approved maintenance programme;
- (c) upkeep of the equipment, building, site and site services; and
- (d) adequacy of facility records and documentation.

15. Flight inspection

A CNS provider shall ensure that the radio navigation aids prescribed by the Authority are available for use by aircraft engaged in air navigation and are subjected to periodic ground and flight inspection.

16. Operation and maintenance plan

- (1) A CNS provider shall establish an operation and maintenance plan for all CNS facilities in order to meet the safety requirements under these Regulations.
- (2) The CNS provider shall ensure that the operation and maintenance plan established under sub-regulation (1) provides for the timely and appropriate detection and warning of system failures and degradations.

17. Training requirements for CNS personnel

- (1) A CNS provider shall ensure that all its personnel possess the skills and competencies required in the provision of the Communication Navigation and Surveillance services.
- (2) The CNS provider shall-
 - (a) develop a training policy and programme for the personnel;
 - (b) maintain individual training records and plans for each of its personnel; and
 - (c) conduct periodic review of the training plan.

18. CNS personnel requirements

- (1) A CNS provider shall employ competent personnel to perform the installation, operation and maintenance of communication, navigation and surveillance system in the designated airspace and at aerodromes.
- (2) A CNS provider shall provide in the MANSOPS an analysis of the personnel required to perform the Communication Navigation and surveillance services for each facility taking into account the duties and workload required.
- (3) A person shall not perform a function related to the installation, operation or maintenance of any communication, navigation and a surveillance system unless—
 - (a) that person has successfully completed training in the performance of that function;
 - (b) the CNS provider is satisfied that the technical person is competent in performing that function; and
 - (c) that person is certified as prescribed by the authority.

19. Proficiency certification program.

The authority shall develop a proficiency certification program of personnel who are engaged in the installation, operation and maintenance of Communication, Navigation and Surveillance systems used in the designated airspace and at aerodromes.

20. Installation, operation and maintenance of CNS systems.

A CNS provider shall establish procedures that ensure that the communication, navigation and surveillance systems—

- (a) are operated, maintained, available and reliable in accordance with the requirements prescribed by the authority;
- (b) are designed to meet the applicable operational specification for that facility;
- (c) are installed and commissioned as prescribed by the authority; and
- (d) conform to the applicable system characteristics and specification as prescribed in by the authority.

PART III- DISTRESS FREQUENCIES

21. Frequencies for emergency locator transmitters (ELTs) for search and rescue

All emergency locator transmitters carried in accordance with Civil Aviation (Operations of Aircraft) Regulations shall operate on both 406 MHz and 121.5 MHz.

22. Search and rescue frequencies

- (1) The frequencies 3 023 kHz and 5 680 kHz shall be employed where there is a requirement for the use of high frequencies for search and rescue scene of action coordination purposes.
- (2) Where specific frequencies are required for communication between rescue coordination centers and aircraft engaged in search and rescue operations, the frequencies shall be selected regionally from the appropriate aeronautical mobile frequency bands in light of the nature of the provisions made for the establishment of search and rescue aircraft.

PART IV- UTILIZATION OF FREQUENCIES BELOW 30 MHz

23. Method of operations

In the aeronautical mobile service, single channel simplex shall be used in radiotelephone communications utilizing radio frequencies below 30 MHz in the bands allocated exclusively to the aeronautical mobile (R) service.

24. Assignment of single sideband channels

Single sideband channels shall be assigned in accordance with provisions contained in the Schedule 1 and Civil Aviation (Surveillance and Collision Avoidance Systems) Regulations, 2019.

25. Assignment of frequencies for aeronautical operational control communications

Assignment of frequencies for aeronautical operational control communications shall be in accordance with the provisions contained in Schedule 1.

26. Non Directional Beacon frequency management

- (1) Non Directional Beacon frequency management shall take into account the following-
 - (a) the interference protection required at the edge of the rated coverage;
 - (b) the application of the figures shown for typical Automatic Direction Finder equipment;
 - (c) the geographical spacings and the respective rated coverages; and
 - (d) the possibility of interference from spurious radiation generated by non-aeronautical sources.
- (2) To alleviate frequency congestion problems at locations where two separate ILS facilities serve opposite ends of a single runway, the assignment of a common frequency to both of the outer locators and the assignment of a common frequency to both of the inner locators shall be permitted, provided that:
 - (a) the operational circumstances permit;
 - (b) each locator is assigned a different identification signal; and
 - (c) arrangements are made whereby locators using the same frequency cannot radiate simultaneously.

PART V- UTILIZATION OF FREQUENCIES ABOVE 30 MHz

27. General allotment of frequency band 117.975 – 137.000 MHz

The block allotment of the frequency band 117.975 – 137.000 MHz shall be as specified in Schedule 2.

28. Frequency separation and limits of assignable frequencies

- (1) The lowest assignable frequency shall be 118.000 MHz and the highest 136.975 MHz in the frequency band 117.975 – 137.000 MHz.
- (2) The minimum separation between assignable frequencies in the aeronautical mobile (R) service shall be 8.33 kHz.
- (3) Requirements for mandatory carriage of equipment specifically designed for 8.33 kHz channel spacing shall be made on the basis of regional air navigation agreements which specify the airspace of operation and the implementation timescales for the carriage of equipment, including the appropriate lead time.
- (4) Requirements for mandatory carriage of equipment specifically designed for VDL Mode 2, VDL Mode 3 and VDL Mode 4 shall be made on the basis of regional air navigation agreements which specify the airspace of operation and the implementation timescales for the carriage of equipment, including the appropriate lead time.
- (5) The agreement indicated in sub regulation (4) shall provide at least two years' notice of mandatory carriage of airborne systems.
- (6) In regions where 25 kHz channel spacing (DSBAM and VHF digital link (VDL)) and 8.33 kHz DSB-AM channel spacing are in operation, the publication of the assigned frequency or channel of operation shall conform to the channel contained in Schedule 2.

29. Frequencies used for particular functions

- (1) The emergency channel (121.500 MHz) shall be used only for genuine emergency purposes, as outlined below-
 - (a) to provide a clear channel between aircraft in distress or emergency and a ground station when the normal channels are being utilized for other aircraft;
 - (b) to provide a VHF communication channel between aircraft and aerodromes, not normally used by international air services, in case of an emergency condition arising;
 - (c) to provide a common VHF communication channel between aircraft, either civil or military, and between such aircraft, and surface services, involved in common search and rescue operations, prior to changing when necessary to the appropriate frequency;
 - (d) to provide air-ground communication with aircraft when airborne equipment failure prevents the use of the regular channels;

- (e) to provide a channel for the operation of emergency locator transmitters, and for communication between survival craft and aircraft engaged in search and rescue operations; and
 - (f) to provide a common VHF channel for communication between civil aircraft and intercepting aircraft or intercept control units and between civil or intercepting aircraft and air traffic services units in the event of interception of the civil aircraft.
- (2) The frequency 121.500 MHz shall be provided at-
- (a) all area control and flight information centers;
 - (b) aerodrome control towers, approach control offices serving international aerodromes and international alternate aerodromes; and
 - (c) any additional location designated by the appropriate ATS authority, where the provision of that frequency is considered necessary to ensure immediate reception of distress calls or to serve the purposes specified in sub regulation (1).
- (3) The frequency 121.500 MHz shall be available to intercept control units where necessary for the purpose specified in sub regulation (1) (f).
- (4) The emergency channel shall be guarded continuously during the hours of service of the units at which it is installed.
- (5) The emergency channel shall be guarded on a single channel simplex operation basis.
- (6) The emergency channel (121.500 MHz) shall be available only with the characteristics as contained in the Civil Aviation (Surveillance and Collision Avoidance Systems) Regulations, 2019.
- (7) An air-to-air VHF communications channel on the frequency of 123.450 MHz shall be designated to enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.
- (8) In remote and oceanic areas out of range of VHF ground stations, the air-to-air VHF communications channel on the frequency 123.450 MHz shall be available only with the characteristics as contained in the Civil Aviation (Surveillance and Collision Avoidance Systems) Regulations, 2019.

30. Common signalling channel VDL Mode 4

In areas where VDL Mode 4 is implemented, the frequencies 136.925 MHz and 113.250 MHz shall be provided as common signalling channels to the VHF digital link Mode 4.

31. Auxiliary frequencies for search and rescue operations

- (1) Where a requirement is established for the use of a frequency auxiliary to 121.500 MHz, as stipulated in regulation 29 (1) (c), the frequency 123.100 MHz shall be used.
- (2) The auxiliary search and rescue channel 123.100 MHz shall be available only with the characteristics as specified in Civil Aviation (Surveillance and Collision Avoidance Systems) Regulations 20...:-

32. Provisions concerning the deployment of VHF frequencies and the avoidance of harmful interference

The provisions concerning the deployment of VHF frequencies and the avoidance of harmful interference are as specified in Schedule 3.

33. Method of operation

- (1) Single channel simplex operation shall be used in the frequency band 117.975 – 137 MHz at all stations providing service for aircraft engaged in international air navigation.
- (2) In addition to sub-regulation (1), the ground-to-air voice channel associated with a standard radio navigational aid shall be used, subject to regional agreement, for broadcast or communication purposes or both.

34. Plan of assignable VHF radio frequencies for use in the international aeronautical mobile service

- (1) The frequencies in the band 117.975 – 137.000 MHz for use in the aeronautical mobile (R) service shall be selected from the lists specified in Schedule 4.
- (2) Frequencies for operational control communications required to enable aircraft operating agencies to meet the obligations prescribed in Civil Aviation (Operation of Aircraft) Regulations 2019 shall be selected from a dedicated band which is determined regionally.
- (3) The frequencies allotted for use in the aeronautical mobile (R) service in a particular region shall be limited to the number determined as being necessary for operational needs in the region.

35. Utilization in the band 108 – 117.975 MHz

The block allotment of the frequency band 108 – 117.975 MHz shall be as follows-

- (1) For band 108 – 111.975 MHz:
 - (a) ILS in accordance with sub-regulation (2) and the Civil Aviation (Radio Navigation Aids) Regulations 2019;
 - (b) VOR provided that-

- (i) no harmful adjacent channel interference is caused to ILS;
- (ii) only frequencies ending in either even tenths or even tenths plus a twentieth of a megahertz are used.
- (iii) Global Navigation Satellite Systems ground-based augmentation system in accordance with Civil Aviation (Radio Navigation Aids) Regulations 2019 provided that no harmful interference is caused to Instrument Landing System and VHF Omni-directional Range.

(2) For band 111.975 – 117.975 MHz:

- (a) VHF Omni-directional Range;
- (b) Global Navigation Satellite Systems ground-based augmentation system in accordance with Civil Aviation (Radio Navigation Aids) Regulations 2019 provided that no harmful interference is caused to VHF Omni-directional Range.

36. Regional Assignment planning

- (1) The frequencies for ILS facilities for regional assignment planning shall be selected in the following order-
 - (a) localizer channels ending in odd tenths of a megahertz and their associated glide path channels; and
 - (b) localizer channels ending in odd tenths plus a twentieth of a megahertz and their associated glide path channels.
- (2) ILS channels identified by localizer frequencies ending in an odd tenth plus one twentieth of a megahertz in the band 108 – 111.975 MHz shall be permitted to be utilized on the basis of regional agreement.
- (3) For regional assignment planning, the frequencies for VHF Omni-directional Range facilities shall be selected in the following order-
 - (a) frequencies ending in odd tenths of a megahertz in the band 111.975 – 117.975 MHz;
 - (b) frequencies ending in even tenths of a megahertz in the band 111.975 – 117.975 MHz;
 - (c) frequencies ending in even tenths of a megahertz in the band 108 – 111.975 MHz;
 - (d) frequencies ending in 50 kHz in the band 111.975 – 117.975 MHz, except as provided in sub-regulation (4); and
 - (e) frequencies ending in even tenths plus a twentieth of a megahertz in the band 108 – 111.975 MHz except as provided in sub-regulation (4).
- (4) Frequencies for VHF Omni-directional Range facilities ending in even tenths plus a twentieth of a megahertz in the band 108 – 111.975 MHz and

all frequencies ending in 50 kHz in the band 111.975 – 117.975 MHz shall be permitted to be utilized on the basis of a regional agreement when the frequencies have become applicable as follows-

- (a) in the band 111.975 – 117.975 MHz for restricted use;
- (b) for general use in the band 111.975 – 117.975 MHz at a date fixed by the authority but at least one year after the approval of the regional agreement concerned; and
- (c) for general use in the band 108 – 111.975 MHz at a date fixed by the authority but giving a period of two years or more after the approval of the regional agreement concerned.

37. Airborne equipment protection while deploying VHF Omni-directional Range systems

To protect the operation of airborne equipment during the initial stages of deploying VHF Omni-directional Range systems utilizing 50 kHz channel spacing in an area where the existing facilities may not fully conform to the Civil Aviation (Radio Navigation Aids) Regulations, 2019 all existing VHF Omni-directional Range systems within interference range of a facility utilizing 50 kHz channel spacing shall be modified by the CNS provider to comply with the provisions of Civil Aviation (Radio Navigation Aids) Regulations, 2019.

38. Frequency deployment

- (1) The geographical separation between facilities operating on the same and adjacent frequencies shall be determined regionally and be based on the following criteria:
 - (a) the required functional service radii of the facilities;
 - (b) the maximum flight altitude of the aircraft using the facilities; and
 - (c) the desirability of keeping the minimum Instrument Flight Region altitude as low as the terrain will permit.
- (2) To alleviate frequency congestion problems at locations where two separate ILS facilities serve opposite ends of the same runway or different runways at the same airport, the assignment of identical ILS localizer and glide path paired frequencies shall be permitted provided that-
 - (a) the operational circumstances permit;
 - (b) each localizer is assigned a different identification signal; and
 - (c) arrangements are made whereby the localizer and glide path not in operational use cannot radiate.

39. Utilization in the band 960 – 1 215 MHz for Distance Measuring Equipment

- (1) Distance Measuring Equipment operating channels bearing the suffix “X” or “Y” as contained in the Civil Aviation (Radio Navigation Aids) Regulations, 2019 shall be chosen on a general basis without restriction.
- (2) Distance Measuring Equipment channels bearing the suffix “W” or “Z” in the Civil Aviation (Radio Navigation Aids) Regulations, 2019 shall be chosen
- (3) For regional assignment planning, the channels for Distance Measuring Equipment associated with Instrument Landing Systems shall be selected from Table 1-1 contained in Schedule 5.

40. Distance Measuring Equipment Channels Groups 1 to 5

- (1) The Distance Measuring Equipment channels in these groups shall be permitted by the authority to be used generally.
- (2) In selecting channels for assignment purposes, when a Distance Measuring Equipment is intended to operate on a runway in association with an Instrument Landing Systems, the Distance Measuring Equipment channel, if possible, shall be selected from Group 1 or 2 and paired with the Instrument Landing Systems frequency as indicated in the Distance Measuring Equipment channelling and pairing table contained in Civil Aviation (Radio Navigation Aids) Regulations 2019.

PART VI – EXEMPTIONS

41. Requirements for application for exemption.

- (1) A person may apply to the authority for an exemption from any provision of these Regulations.
- (2) A person who intends to apply for an exemption under sub-regulation (1) may, except for an emergency, apply to the authority at least sixty days prior to the proposed effective date, giving the following information—
 - (a) name and contact address including electronic mail and fax if any;
 - (b) telephone number;
 - (c) a citation of the specific requirement from which the applicant seeks exemption;
 - (d) justification for the exemption;
 - (e) a description of the type of operations to be conducted under the proposed exemption;
 - (f) the proposed duration of the exemption;
 - (g) an explanation of how the exemption would be in the public interest;

- (h) a detailed description of the alternative means by which the applicant will ensure a level of safety equivalent to that established by the regulation in question;
 - (i) a safety risk assessment carried out in respect of the exemption applied for;
 - (j) if the applicant handles international operations and seeks to operate under the proposed exemption, an indication whether the exemption would contravene any provision of the Standards and Recommended Practices of the International Civil Aviation Organization (ICAO); and
 - (k) any other information that the authority may require.
- (3) Where the applicant seeks emergency processing of an application for exemption, the application shall contain supporting facts and reasons for not filing the application within the time specified in sub regulation (2) and satisfactory reason for deeming the application an emergency.
- (4) The authority may in writing, refuse an application made under sub regulation (3), where in the opinion of the authority, the reasons given for emergency processing are not satisfactory.
- (5) The application for exemption shall be submitted together with a fee prescribed by the authority.

42. Review and publication

- (1) The authority shall review the application for exemption made under regulation 41 for accuracy and compliance and if the authority is satisfied, the authority shall publish a detailed summary of the application for comments, within a prescribed time, in either—
- (a) the Uganda Gazette;
 - (b) aeronautical information circular; or
 - (c) a newspaper of wide circulation.
- (2) Where applicant does not comply with the application requirements, the authority shall request the applicant in writing, to comply with the requirements prior to publication or making a decision under sub regulation (3).
- (3) If the request is for emergency relief, the authority shall publish the decision immediately after processing the application.

43. Evaluation of request.

- (1) Where the applicant satisfies the application requirements, the authority shall conduct an evaluation of the request which shall include-
- (a) determination of whether an exemption would be in the public interest;
 - (b) a determination, after a technical evaluation of whether the applicant's proposal would provide a level of safety equivalent to that established by the regulation, although where the authority decides that a technical

- evaluation of the request would impose a significant burden on the technical resources, the authority may deny the exemption on that basis;
- (c) a determination of whether a grant of the exemption would contravene these Regulations; and
 - (d) a recommendation based on the preceding elements, of whether the request should be granted or denied, and of any conditions or limitations that should be part of the exemption
- (2) The authority shall notify the applicant in writing, the decision to grant or deny the request and publish a detailed summary of its evaluation and decision.
 - (3) The summary referred to in sub-regulation (2) shall specify the duration of the exemption and any conditions or limitations of the exemption.
 - (4) If the exemption affects a significant population of the aviation community, the authority shall publish the summary in aeronautical information circular.

PART VII - GENERAL PROVISIONS

44. Drug and alcohol testing and reporting.

- (1) A person who performs any function prescribed by these Regulations directly or by contract under the provisions of these Regulations may be tested for drug or alcohol usage.
- (2) A person who—
 - (a) refuses to submit to a test to indicate the percentage by weight of alcohol in the blood; or
 - (b) refuses to submit to a test to indicate the presence of narcotic drugs, marijuana, or depressant or stimulant drugs or substances in the body, when requested by a law enforcement officer or the authority, or refuses to furnish or to authorise the release of the test results requested by the authority shall—
 - (i) be denied any license, certificate, rating, qualification, or authorisation issued under these Regulations for a period of up to one year from the date of the refusal; or
 - (ii) have their license, certificate, rating, qualification, or authorisation issued under these Regulations suspended or revoked.
- (3) A person who is convicted for the violation of any law in force relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances, shall—
 - (a) be denied any license, certificate, rating, qualification, or authorisation issued under these Regulations for a period of up to one year after the date of conviction; or

- (b) have their license, certificate, rating, qualification, or authorisation issued under these Regulations suspended or revoked.

45. Change of Name.

- (1) A CNSP holder of a certificate issued under these Regulations may apply to the authority for—
 - (a) replacement of the certificate if lost or destroyed;
 - (b) change of name on the certificate; or
 - (c) an endorsement on the certificate
- (2) when applying under sub regulation (1), the holder of a certificate shall submit to the authority—
 - (a) the original certificate or a copy thereof in case of loss; and
 - (b) a court order, or other legal document verifying the name change.
- (3) The authority shall return to the holder of a certificate, with the appropriate changes applied for, if any, the originals specified under paragraph (2) and, where necessary, retain copies of the original certificate.

46. Change of address.

- (1) A holder of a CNSP certificate issued under these Regulations shall notify the authority of the change in the physical and mailing address within fourteen days of such change.
- (2) A person who does not notify the authority of the change in the physical and mailing address within the time frame specified in sub-regulation (1) shall not exercise the privileges of the certificate.

47. Replacement of documents.

A person may apply to the authority in the prescribed form for replacement of documents issued under these Regulations if such documents are lost or destroyed.

48. Use and retention of documents and records.

- (1) A person shall not—
 - (a) use any certificate or exemption issued or required by or under these Regulations which is forged, altered, cancelled, or suspended, or to which he is not entitled;
 - (b) forge or alter any certificate or exemption issued or required by or under these Regulations;
 - (c) lend any certificate or exemption issued or required by or under these Regulations to any other person;
 - (d) make any false representation for the purposes of procuring for himself or any other person the grant, issue, renewal or variation of any such certificate or exemption; or

- (e) mutilate, alter, render illegible or destroy any records, or any entry made, required by or under these Regulations to be maintained, or make, or procure or assist in the making of, any false entry in any such record, or omit to make a material entry in such record.
- (2) All records required to be maintained by or under these Regulations shall be recorded in a permanent and indelible material.
- (3) A person shall not issue any certificate or exemption under these Regulations unless he is authorised to do so by the authority.
- (4) A person shall not issue any certificate referred to in sub-regulation (3) unless he has satisfied himself that all statements in the certificate are correct, and that the applicant is qualified to hold that certificate.

49. Reports of violation

- (1) A person who knows of a violation of the Act, or any Regulations, rules, or orders issued there under, shall report it to the authority.
- (2) The authority may determine the nature and type of investigation or enforcement action that need to be taken.

50. Failure to comply with direction

A person who does not comply with any direction given to him or her by the authority or by any authorised person under any provision of these Regulations shall be deemed for the purposes of these Regulations to have committed an offence.

51. Aeronautical fees.

- (1) The authority shall notify, in writing, the fees to be charged in connection with the issue, renewal or variation of any certificate, test, inspection or investigation required by, or for the purposes of these Regulations any orders, notices or proclamations made there under.
- (2) Upon an application being made in connection with which any fee is chargeable in accordance with the provisions of sub-regulation (1), the applicant shall be required, before the application is accepted, to pay a non-refundable fee as prescribed by the authority.

PART VIII - OFFENCES AND PENALTIES

52. Contravention of Regulations.

A person who contravenes any provision of these Regulations may have his certificate or exemption cancelled or suspended.

53. Penalties.

- (1) A person who contravenes any provision of these Regulations shall, upon conviction, be liable to a fine or imprisonment or both, and in the case of a

continuing contravention, each day of the contravention shall constitute a separate offence.

- (2) A person who contravenes any provision of these Regulations shall upon conviction be liable to a fine not exceeding fifty currency points or to imprisonment for a term not exceeding six months or to both.
- (3) If it is proved that an act or omission by a person, which would otherwise have been a contravention by that person of a provision of these Regulations was due to an unavoidable cause even with the exercise of reasonable care by that person, the act or omission shall not be deemed a contravention by that person.

54. Appeal

A person aggrieved by an order made under these Regulations may, within twenty-one days of such order being made, appeal against the order to a court of law with competent jurisdiction.

SCHEDULES

Schedule 1

Regulation 25

1.1 Assignment of single sideband channels

1.1.1 For the operational use of the channels concerned administrations shall take into account the provisions of 27/19 of Appendix 27 of the ITU Radio Regulations.

1.1.2 The use of aeronautical mobile (R) frequencies below 30 MHz for international operations shall be coordinated in accordance with Appendix S27 of the ITU Radio Regulations as follows-

27/19 The International Civil Aviation Organization (ICAO) co-ordinates radio communications of the aeronautical mobile (R) service with international

aeronautical operations and ICAO shall be consulted in all appropriate cases in the operational use of the frequencies in the plan.

1.1.3 Where international operating requirements for HF communications cannot be satisfied by the Frequency Allotment Plan at Part 2 of Appendix 27 to the Radio Regulations, an appropriate frequency may be assigned as specified in Appendix 27 by the application of the following provisions:

27/20 It is recognized that not all the sharing possibilities have been exhausted in the Allotment Plan contained in this Appendix. Therefore, in order to satisfy particular operational requirements which are not otherwise met by this Allotment Plan, administrations may assign frequencies from the aeronautical mobile (R) bands in areas other than those to which they are allotted in this Plan. However, the use of the frequencies so assigned must not reduce the protection to the same frequencies in the areas where they are allotted by the Plan below that determined by the application of the procedure defined in Part I, Section II B of this Appendix.

27/21 When necessary to satisfy the needs of international air operations administrations may adapt the allotment procedure for the assignment of aeronautical mobile (R) frequencies, which assignments shall then be the subject of prior agreement between administrations affected.

27/22 The co-ordination described in No. 27/19 shall be effected where appropriate and desirable for the efficient utilization of the frequencies in question, and especially when the procedures of No. 27/21 are unsatisfactory.

- 1.1.4 The use of classes of emission J7B and J9B shall be subject to the following provisions of Appendix 27:

27/12 For radiotelephone emissions the audio frequencies will be limited to between 300 and 2 700 Hz and the occupied bandwidth of other authorized emissions will not exceed the upper limit of J3E emissions. In specifying these limits, however, no restriction in their extension is implied in so far as emissions other than J3E are concerned, provided that the limits of unwanted emissions are met (see Nos. 27/73 and 27/74).

27/14 On account of the possibility of interference, a given channel shall not be used in the same allotment area for radiotelephony and data transmissions.

27/15 The use of channels derived from the frequencies indicated in 27/18 for the various classes of emissions other than J3E and H2B will be subject to special arrangements by the administrations concerned and affected in order to avoid harmful interference which may result from the simultaneous use of the same channel for several classes of emission.

- 1.2 Assignment of frequencies for aeronautical operational control communications

- 1.2.1 Worldwide frequencies for aeronautical operational control communications are required to enable aircraft operating agencies to meet the obligations prescribed in Civil Aviation (Operations of Aircraft) Regulations. Assignment of these frequencies shall be in accordance with the following provisions of Appendix 27:

27/9 A world-wide allotment area is one in which frequencies are allotted to provide long distance communications between an aeronautical station within that allotment area and aircraft operating anywhere in the world. *

27/217 The world-wide frequency allotments appearing in the tables at No. 27/213 and Nos. 27/218 to 27/231, except for carrier (reference) frequencies 3 023 kHz and 5 680 kHz, are reserved for assignment by administrations to stations operating under authority granted by the administration concerned for the purpose of serving one or more aircraft operating agencies. Such assignments are to provide communications between an appropriate aeronautical station and an aircraft station anywhere in the world for exercising control over regularity of flight and for safety of aircraft. World-

wide frequencies are not to be assigned by administrations for MWARA, RDARA and VOLMET purposes. Where the operational area of an aircraft lies wholly within a RDARA or sub-RDARA boundary, frequencies allotted to those RDARAs and sub-RDARAs shall be used.

DRAFT

SCHEDULE 2

1.1 Table 1-1: Allotment table

Regulation 27

1.2 Table 1-2 : Channeling/frequency pairing

Regulation 28 (6)

Frequency (MHz)	Time slot	Channel Spacing (MHz)	Channel
118.0000		25	118.000
118.0000	A	25	118.001
118.0000	B	25	118.002
118.0000	C	25	118.003
118.0000	D	25	118.004
118.0000		8.33	118.005
118.0083		8.33	118.010
118.0167		8.33	118.015
118.0250	A	25	118.021
118.0250	B	25	118.022
118.0250	C	25	118.023
118.0250	D	25	118.024
118.0250		25	118.025
118.0250		8.33	118.030
118.0333		8.33	118.035
118.0417		8.33	118.040
118.0500		25	118.050
118.0500	A	25	118.051

	Block allotment frequencies (MHz)	Worldwide utilization	Remarks
a)	118.000 – 121.450 inclusive	International and National Aeronautical Mobile Services	Specific international allotments will be determined in the light of regional agreement.
b)	121.500	Emergency frequency	In order to provide a guard band for the protection of the aeronautical emergency frequency, the nearest assignable frequencies on either side of 121.500 MHz are 121.450 MHz and 121.550 MHz.
c)	121.550 – 121.9917 inclusive	International and National Aeronautical Mobile Services	Reserved for ground movement, pre-flight checking, air traffic services, clearances, and associated operations.
d)	122.000 – 123.050 inclusive	National Aeronautical Mobile Services	Reserved for national allotments.
e)	123.100	Auxiliary frequency SAR	In order to provide a guard band for the protection of the aeronautical auxiliary frequency, the nearest assignable frequencies on either side of 123.100 MHz are 123.050 MHz and 123.150 MHz.
f)	123.150 – 123.6917 inclusive	National Aeronautical Mobile Services	123.450 MHz which is also used as an air-to-air communications channel (see g))
g)	123.450	Air-to-air communications	Designated for use as provided under these Regulations
h)	123.700 – 129.6917 inclusive	International and National	Specific international allotments will be determined in light of regional agreement

		Aeronautica I Mobile Services	
i)	129.700 – 130.8917 inclusive	National Aeronautica I Mobile Services	Reserved for national allotments but may be used in whole or in part, subject to regional agreement.
j)	130.900 – 136.875 inclusive	Internationa I and National Aeronautica I Mobile Services	Specific international allotments will be determined in light of regional agreement.
k)	136.900 – 136.975 inclusive	Internationa I and National Aeronautica I Mobile Services	Reserved for VHF air-ground data link communications.

118.0500	B	25	118.052
118.0500	C	25	118.053
118.0500	D	25	118.054
118.0500		8.33	118.055
118.0583		8.33	118.060
118.0667		8.33	118.065
118.0750	A	25	118.071
118.0750	B	25	118.072
118.0750	C	25	118.073
118.0750	D	25	118.074
118.0750		25	118.075
118.0750		8.33	118.080
118.0833		8.33	118.085
118.0917		8.33	118.090
118.1000		25	118.100

SCHEDULE 3

Regulation 32

- 1.1 Provisions concerning the deployment of VHF frequencies and the avoidance of harmful interference
- 1.1.1 The geographical separation between facilities operating on the same frequency shall, except where there is an operational requirement for the use of common frequencies for groups of facilities, be such that the protected service volume of one facility is separated from the protected service volume of another facility by a distance not less than that required to provide a desired to undesired signal ratio of 20 dB or by a separation distance not less than the sum of the distances to the associated radio horizon of each service volume, whichever is smaller.
- 1.1.2 For areas where frequency assignment congestion is severe or is anticipated to become severe, the geographical separation between facilities operating on the same frequency shall, except where there is an operational requirement for the use of common frequencies for groups of facilities, be such that the protected service volume of one facility is separated from the protected service volume of another facility by a distance not less than that required to provide a desired to undesired signal ratio of 14 dB or by a separation distance not less than the sum of the distances to the associated radio horizon of each service volume, whichever is smaller. This provision shall be implemented on the basis of a regional air navigation agreement.

1.1.3 The application of the minimum separation distance based on the sum of the radio horizon distance of each facility assumes that it is highly unlikely that two aircraft will be at the closest points between and at the maximum altitude of the protected service volume of each facility.

1.1.4 The distance to the radio horizon from a station in an aircraft is normally given by the formula:

$$D = K \sqrt{h}$$

where D = distance in nautical miles;

h = height of the aircraft station above earth;

K = (corresponding to an effective earth's radius of 4/3 of the actual radius);

= 2.22 when h is expressed in metres; and

= 1.23 when h is expressed in feet.

1.1.5 In calculating the radio line-of-sight distance between a ground station and an aircraft station, the distance from the radio horizon of the aircraft station computed from Note 3 must be added to the distance from the radio horizon of the ground station. In calculating the latter, the same formula is employed, taking for h the height of the ground station transmitting antenna.

1.1.6 The geographical separation between facilities operating on adjacent channels shall be such that points at the edge of the protected service volume of each facility are separated by a distance sufficient to ensure operations free from harmful interference.

1.1.7 The protection height shall be a height above a specified datum associated with a particular facility, such that below it harmful interference is improbable.

1.1.8 The protection height to be applied to functions or to specific facilities shall be determined regionally, taking into consideration the following factors:

- a) the nature of the service to be provided;
- b) the air traffic pattern involved;
- c) the distribution of communication traffic;
- d) the availability of frequency channels in airborne equipment;
- e) probable future developments.

1.1.9 Where the protected service volume is less than operationally desirable, separation between facilities operating on the same frequency should not be less than that necessary to ensure that an aircraft at the upper edge of the operational service volume of one facility does not come above the radio

horizon with respect to emissions belonging to the service of adjacent facilities.

- 1.1.10 The effect of this recommendation is to establish a geographical separation distance below which harmful interference is probable.
- 1.1.11 The geographical separation between VHF VOLMET stations shall be determined regionally and shall be such that operations free from harmful interference are secured throughout the protected service volume of each VOLMET station.
- 1.1.12 In the frequency band 117.975 – 137.000 MHz, the frequencies used for National Aeronautical Mobile Services, unless worldwide or regionally allotted to this specific purpose, shall be so deployed that no harmful interference is caused to facilities in the International Aeronautical Mobile Services.
- 1.1.13 Any inter-State interference shall be resolved by consultation between the States concerned.
- 1.1.14 The communication coverage provided by a VHF ground transmitter shall, in order to avoid harmful interference to other stations, be kept to the minimum consistent with the operational requirement for the function.

SCHEDULE 4

Regulation 34

Assignable Frequencies

1.1 List of assignable frequencies shall be;

1.1.1 List A – assignable frequencies in regions or areas where 25 kHz frequency assignments are deployed

118.000 – 121.450 MHz in 25 kHz steps

121.550 – 123.050 MHz in 25 kHz steps

123.150 – 136.975 MHz in 25 kHz steps

1.1.2 List B – assignable frequencies in regions or areas where 8.33 kHz frequency assignments are deployed

118.000 – 121.450 MHz in 8.33 kHz steps

121.550 – 123.050 MHz in 8.33 kHz steps

SCHEDULE 5

Regulation 39(3)

Channels for DME Associated with MLS

1.1 Table 1-1: Channels for DME associated with MLS

Group	DME channels	<i>Associated paired VHF channels</i>	Remarks	Assignment procedure
1	EVEN 18X to 56X	ILS 100 kHz spacings	Would normally be used if a single DME is paired with ILS and is part of MLS	For general use
2	EVEN 18Y to 56Y	ILS 50 kHz spacings		For general use
3	EVEN 80Y to 118Y	VOR 50 kHz spacings Odd tenths of a MHz		For general use
4	ODD 17Y to 55Y	VOR 50 kHz spacings		For general use
5	ODD 81Y to 119Y	VOR 50kHz spacings Even tenths of a MHz		For general use
6	EVEN 18W to 56W	No associated paired VHF channel		For later use
7	EVEN 18Z to 56Z	No associated paired VHF channel		For later use
8	EVEN 80Z to 118Z	No associated		For later use

		paired VHF channel		
9	ODD 17Z to 55Z	No associated paired VHF channel		For later use
10	ODD 81Z to 119Z	No associated paired VHF channel		For later use

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 ENG. MONICA AZUBA NTEGE
Minister of Works and Transport.