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STATUTORY INSTRUMENTS
2019 No…….

THE CIVIL AVIATION (COMMUNICATION PROCEDURES) REGULATIONS, 2019

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STATUTORY INSTRUMENTS

2019 No…….

The Civil Aviation (Communication Procedures) Regulations, 2019

(Under section 61 of the Civil Aviation Authority Act, Cap 354)

IN EXERCISE of powers conferred upon the Minister responsible for civil aviation by section 61 of the Civil Aviation Authority Act, Cap 354 these Regulations are made this ……. day of ……. 2019.

PART I - PRELIMINARY

1. Title

These Regulations may be cited as the Civil Aviation (Communication Procedures) Regulations, 2019.

2. Interpretation

In these Regulations, unless the context otherwise requires-

"aeronautical broadcasting service" means a broadcasting service intended for the transmission of information relating to air navigation;

"aeronautical fixed circuit" means a circuit forming part of the aeronautical fixed service (AFS);

"aeronautical fixed service (AFS)" means a telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services;

"aeronautical fixed station" means a station in the aeronautical fixed service;

"aeronautical fixed telecommunication network (AFTN)" means a worldwide system of aeronautical fixed circuits provided as part of the aeronautical fixed service for the exchange of messages or digital data between aeronautical fixed stations having the same or compatible communications characteristics;

"aeronautical fixed telecommunication network circuit" means a circuit forming part of the aeronautical fixed telecommunication network (AFTN);

“aeronautical mobile (R)* service (RR S1.33)” means an aeronautical mobile service reserved for communications relating to safety and regularity of flight, primarily along national or international civil air routes;

“aeronautical mobile service (RR S1.32)” means a mobile service between aeronautical stations and aircraft stations or between aircraft stations, in which survival craft stations may participate;

“aeronautical mobile-satellite (R)* service (RR S1.36)” means an aeronautical mobile-satellite service reserved for communications relating to safety and regularity of flights, primarily along national or international civil air routes;

“aeronautical mobile-satellite service (RR S1.35)” means a mobile satellite service in which mobile earth stations are located on board aircraft;

“aeronautical radio navigation service (RR S1.46)” means a radio navigation service intended for the benefit and for the safe operation of aircraft;

“aeronautical station (RR S1.81)” means a land station in the aeronautical mobile service;
“aeronautical telecommunication agency” means an agency responsible for operating a station in the aeronautical telecommunication service;

“aeronautical telecommunication log” means a record of the activities of an aeronautical telecommunication station;

“aeronautical telecommunication service” means a telecommunication service provided for any aeronautical purpose;

“aeronautical telecommunication station” means a station in the aeronautical telecommunication service;

“AFTN destination station” means an AFTN station to which messages or digital data are addressed for processing for delivery to the addressee;

“AFTN origin station” means an AFTN station where messages or digital data are accepted for transmission over the AFTN;

“AFTN station” means a station forming part of the aeronautical fixed telecommunication network (AFTN) and operating as such under the authority or control of a State;

“aircraft operating agency” means the person, organization or enterprise engaged in, or offering to engage in, an aircraft operation;

“aircraft station (RR S1.83)” means a mobile station in the aeronautical mobile service, other than a survival craft station, located on board an aircraft;

“air-ground communication” means a two-way communication between aircraft and stations or locations on the surface of the earth;

“air-ground control radio station” means an aeronautical telecommunication station having primary responsibility for handling communications pertaining to the operation and control of aircraft in a given area;

“air navigation services” means air traffic, communication, navigation, surveillance and aeronautical information services;

“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;

“air-report” means a report from an aircraft in flight prepared in conformity with requirements for position and operational or meteorological reporting;

“altitude” means the vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL);

“ATS direct speech circuit” means an aeronautical fixed service (AFS) telephone circuit, for direct exchange of information between air traffic services (ATS) units;

“authority” means the Civil Aviation Authority established under section 3 of the Act;

“automatic relay installation” means a teletypewriter installation where automatic equipment is used to transfer messages from incoming to outgoing circuits;

"broadcast" means a transmission of information relating to air navigation that is not addressed to a specific station or stations;

"communication centre" means an aeronautical fixed station which relays or retransmits telecommunication traffic from a number of other aeronautical fixed stations directly connected to it;

"current data authority" means the designated ground system through which a CPDLC dialogue between a pilot and a controller currently responsible for the flight is permitted to take place;

"downstream data authority" means a designated ground system, different from the current data authority, through which the pilot can contact an appropriate ATC unit for the purposes of receiving a downstream clearance;

"flight level" means a surface of constant atmospheric pressure which is related to a specific pressure datum, 1 013.2 hectopascals (hPa), and is separated from other surfaces by specific pressure intervals;

"free text message element" means a message element used to convey information not conforming to any standardized message element in the CPDLC message set;

"fully automatic relay installation" means a teletypewriter installation where interpretation of the relaying responsibility in respect of an incoming message and the resultant setting up of the connections required to effect the appropriate retransmissions is carried out automatically, as well as all other normal operations of relay, thus obviating the need for operator intervention, except for supervisory purposes;

"ground-to-air communication" means a one-way communication from stations or locations on the surface of the earth to aircraft;

"human performance" means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations;

"international telecommunication service" means a telecommunication service between offices or stations of different States, or between mobile stations which are not in the same State, or are subject to different States;

“interpilot air-to-air communication” means a two-way communication on the designated air-to-air channel 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;

“location indicator” means a four-letter code group formulated in accordance with rules prescribed by ICAO and assigned to the location of an aeronautical fixed station;

“message field” means an assigned area of a message containing specified elements of data;

“meteorological operational channel” means a channel of the aeronautical fixed service (AFS), for the exchange of aeronautical meteorological information;

“meteorological operational telecommunication network” means an integrated system of meteorological operational channels, as part of the aeronautical fixed service (AFS), for the exchange of aeronautical meteorological information between the aeronautical fixed stations within the network;

“Minister” means the Minister responsible for aviation;

“mobile surface station” means a station in the aeronautical telecommunication service, other than an aircraft station, intended to be used while in motion or during halts at unspecified points;

“network station” means an aeronautical station forming part of a radiotelephony network;

“next data authority” means the ground system so designated by the current data authority through which an onward transfer of communications and control can take place;

“non-network communications” means radiotelephony communications conducted by a station of the aeronautical mobile service, other than those conducted as part of a radiotelephony network;

“NOTAM” means a notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical

facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations;

“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;

“pre-formatted free text message element” means a free text message element that is stored within the aircraft system or ground system for selection;

“primary frequency” means the radiotelephony frequency assigned to an aircraft as a first choice for air-ground communication in a radiotelephony network;

“radio direction finding (RR S1.12)” means radio determination using the reception of radio waves for the purpose of determining the direction of a station or object;

“radio direction-finding station (RR S1.91)” means a radio determination station using radio direction finding;

“radiotelephony network” means a group of radiotelephony aeronautical stations which operate on and guard frequencies from the same family and which support each other in a defined manner to ensure maximum dependability of air-ground communications and dissemination of air-ground traffic;

“read back” means a procedure whereby the receiving station repeats a received message or an appropriate part of the message back to the transmitting station so as to obtain confirmation of correct reception;

“regular station” means a station selected from stations forming an enroute air-ground radiotelephony network to communicate with or to intercept communications from aircraft in normal conditions;

“route segment” means a route or portion of route usually flown without an intermediate stop;
“routing directory” means a list in a communication centre indicating for each addressee the outgoing circuit to be used;

“secondary frequency” means the radiotelephony frequency assigned to an aircraft as a second choice for air-ground communication in a radiotelephony network;

“semi-automatic relay installation” means a teletypewriter installation where interpretation of the relaying responsibility in respect of an incoming message and the resultant setting up of the connections required to effect the appropriate retransmissions require the intervention of an operator but where all other normal operations of relay are carried out automatically;

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

“SNOWTAM” means a special series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area, by means of a specific format;

“telecommunication (RR S1.3)” means any transmission, emission, or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems;

“teletypewriter tape” means a tape on which signals are recorded in the 5-unit Start-Stop code by completely severed perforations (Chad Type) or by partially severed perforations (Chad less Type) for transmission over teletypewriter circuits;

“torn-tape relay installation” means a teletypewriter installation where messages are received and relayed in teletypewriter tape form and where all operations of relay are performed as the result of operator intervention; and

“tributary station” means an aeronautical fixed station that may route, receive or transmit messages or digital data but which does not relay except for the purpose of serving similar stations connected through it to a communication centre.

3. Application

These Regulations apply to a person who provides communication, navigation or surveillance services within 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 apply for and get an ANSP certificate issued in accordance with the Civil Aviation (Air Navigation Services) Regulations, 2019.

6. Approval of facility

(1) A person shall not provide communication, navigation and surveillance systems or operate a communication, navigation and surveillance facility in a designated airspace and at 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 facilities in a designated airspace and at aerodromes.

7. Inspection and audit

(1) The authority shall carry out safety inspections and audits on CNS facilities, documents and records of the CNS facilities to determine compliance with these Regulations.

(2) An inspector of the authority shall have unrestricted access to the facilities, installations, records and documents of the service provider to determine compliance with these Regulations.

8. Siting 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, 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 procedures for commissioning 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 performance of technical facilities shall be monitored, reviewed and reported by the authority in accordance with these Regulations.

(2) The CNS provider shall provide a 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) The CNS provider shall establish a procedure to control, calibrate and maintain all the equipment required.

(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 the test equipment.

12. Record keeping

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

(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 authorised 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; and

(c) establish a procedure for 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 maintenance programme approved by the authority;

(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 as may be prescribed by the authority are available for use by an 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 the CNS facility, to meet the safety requirements of these Regulations.

(2) The operation and maintenance plan established under sub-regulation (1) shall provide 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 the personnel possess the skills and competencies required in the provision of CNS services.

(2) A CNS provider shall-

(a) develop a training policy and programme for the personnel;

(b) maintain individual training records and plan 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 aerodromes as prescribed by the authority.

(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 surveillance system unless—

(a) that person has successfully completed training in the performance of that function;

(b) a CNS provider is satisfied that the 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 aerodrome.

20. Installation, operation and maintenance of CNS systems

A CNS provider shall establish a procedure to ensure that the communication, navigation and surveillance systems are -

(a) operated, maintained, available and reliable in accordance with the requirements prescribed by the authority;

(b) designed to meet the applicable operational specification for that facility;

(c) installed and commissioned as prescribed by the Authority; and
(d) in conformity with the applicable system characteristics and specification as prescribed in by the authority.

PART III - ADMINISTRATIVE PROVISIONS RELATING TO THE INTERNATIONAL AERONAUTICAL TELECOMMUNICATION SERVICE.

21. Division of service

The international Aeronautical Telecommunication Service shall be divided into four parts as follows -

(a) aeronautical fixed service;
(b) aeronautical mobile service;
(c) aeronautical radio navigation service; and
(d) aeronautical broadcasting service.

22. Telecommunication access

The authority shall ensure that aeronautical telecommunication stations, including end systems and intermediate systems of the aeronautical telecommunication network, are protected from unauthorised direct or remote access.

23. Hours of service

(1) The authority shall give notice of the normal hours of service of stations and offices of the international Aeronautical Telecommunication Service under its control to the aeronautical telecommunication agencies designated to receive this information by other administrations concerned.

(2)) The authority shall give notice of any change in the normal hours of service, before such a change is effected, to the aeronautical telecommunication agencies designated to receive this information by other administrations concerned.

(3) The changes in sub regulation (2) shall be promulgated in a NOTAM.

(4) If a station of the international aeronautical telecommunication service or an aircraft operating agency, requests a change in the hours of service of another station, the change shall be requested as soon as possible after the need for change is known by the station.

(5) The station or aircraft operating agency requesting for the change referred to in sub regulation (4) shall be informed of the decision regarding the request as soon as possible.

24. Supervision

(1) The Minister shall designate the authority responsible to ensure that the international Aeronautical Telecommunication Service is conducted in accordance with these Regulations.

(2) Occasional infringement of the procedures prescribed by these Regulations shall be dealt with by direct communication immediately between the parties interested either by correspondence or by personal contact, when the infringement is not of a serious nature.

(3) Where the authority determines that a serious and repeated infringement has occurred at a station, the person in charge of the station shall make available representations relating to the infringements to the authority.

(4) The authority designated under sub regulation (1) shall exchange information regarding the performance of systems of communication, radio navigation, operation and maintenance or unusual transmission phenomena.

25. Superfluous transmissions

The authority shall ensure that there is no wilful transmission of unnecessary or anonymous signals, messages or data by any station within Uganda.

26. Interference

The air navigation service provider shall ensure that all precautions, such as the choice of frequency and of time and the reduction or if possible, the suppression of radiation are taken to avoid any harmful interference during tests and experiments in any station and any resulting interference eliminated as soon as possible.

PART IV - GENERAL PROCEDURES FOR THE INTERNATIONAL AERONAUTICAL TELECOMMUNICATION SERVICE

27. Extensions of service and closing down of stations

(1) A station of the international Aeronautical Telecommunication Service shall extend its normal hours of service, as required by the authority to provide for traffic necessary for flight operation.

(2) A station shall notify its intention to all other stations with which it is in direct communication to confirm that an extension of service is not required and advise the time of re-opening if not within its normal hours of service.

(3) A station shall notify its intention of closing down either to the control station, if any or to all stations in the network when it is working regularly in a network on a common circuit.

(4) The station referred to in sub-regulation (3) shall continue watch for two minutes and may close down if the station has received no call during this period.

(5) Stations with other than continuous hours of operation, engaged in or expected to become engaged in distress, urgency, unlawful interference or interception traffic, shall extend their normal hours of service to provide the required support to those communications.

28. Acceptance of messages

(1) The Air Navigation Service provider shall accept for transmission only messages coming within the categories specified in Regulation 39.

(2) The responsibility for determining the acceptability of a message shall rest with the station where the message is filed for transmission.

(3) The Air Navigation Service provider of any station through which a message is relayed shall make representations at a later date to the Air Navigation Service provider in control of the accepting station regarding any message which is considered unacceptable.

(4) Only messages for stations forming part of the Aeronautical Telecommunication Service shall be accepted for transmission, except where special arrangements have been made with the air navigation service provider concerned.

(5) Acceptance of a message intended for two or more addresses, whether at the same station or at different stations, shall be permitted subject to the provisions prescribed in Schedule 1.

(6) Messages handled for aircraft operating agencies shall be accepted only when handed in to the telecommunication station in the form specified in these Regulations and by an authorised representative of that agency, or when received from that agency over an authorized circuit.

29. Transmission and delivery of messages

(1) A message accepted under Regulation 28 shall be transmitted, relayed and delivered in accordance with the priority classification and without discrimination or undue delay.

(2) A single office for each aircraft operating agency shall be designated by agreement between the air navigation service provider and the aircraft operating agency concerned for each station of the air navigation service provider from which messages are delivered to one or more aircraft operating agencies.

(3) Stations of the international Aeronautical Telecommunication Service shall be responsible for delivery of messages to the addressee located within the boundaries of the aerodrome served by that station and beyond those boundaries only to the addressee as may be agreed by special arrangements with the administrations concerned.

(4) The authority shall prescribe a form of written record or other permanent means of delivering messages.

(5) Messages originated in the aeronautical mobile service by an aircraft in flight and which require transmission over the aeronautical fixed telecommunication network to effect delivery, shall be reprocessed by the aeronautical telecommunication station into the message format specified in Schedule 1, prior to transmission on the aeronautical fixed telecommunication network.

(6) Messages originated in the aeronautical mobile service by an aircraft in flight and which require transmission over the aeronautical fixed service, other than on an aeronautical fixed telecommunication network circuit, shall be reprocessed by the aeronautical telecommunication station into the format prescribed in Schedule 1, except where, subject to sub-regulation (3), prior and other arrangements have been made between the aeronautical telecommunication agency and the aircraft operating agency concerned for predetermined distribution of messages from aircraft.

(7) Messages without specific address containing -

(a) meteorological information received from an aircraft in flight shall be forwarded without delay to the meteorological office associated with the point of reception; and

(b) air traffic services information from aircraft in flight shall be forwarded without delay to the air traffic services unit associated with the communication station receiving the message.

30. Time systems

(1) Universal co-ordinated time shall be used by all stations in the aeronautical telecommunication service.

(2) The stations referred to in sub-regulation (1) shall designate midnight as 2400 for the end of the day and 0000 for the beginning of the day.

(3) A date-time group shall consist of six figures, the first two figures representing the date of the month and the last four figures representing the hours and minutes in universal co-ordinated time.

31. Record of communications

(1) A station of the aeronautical telecommunication shall maintain a telecommunication log except an aircraft station when using radiotelephony in direct communication with an aeronautical station.

(2) Aeronautical stations shall record messages at the time of their receipt, except that, if during an emergency the continued manual recording results in delays in communication, the recording of messages may be temporarily interrupted and completed at the earliest opportunity.

(3) When a record is maintained in an aircraft station, either in a radiotelephone log or elsewhere, concerning distress communications, harmful interference or interruption to communications, such a record shall be associated with information concerning the time, position and altitude of the aircraft.

(4) In written logs, entries shall be made only by operators on duty except that other persons having knowledge of facts pertinent to the entries may certify in the log the accuracy of entries of the operators.

(5) Superfluous marks or notations shall not be made in the log and all entries shall be complete, clear, correct and intelligible.

(6) Any correction in written logs shall be -

(a) made only by the person making the initial entry;

(b) accomplished by drawing or typing a single line through the incorrect entry, initialling same, recording the time and date of correction; and

(c) made on the next line after the last entry.

(7) Written or automatic telecommunication logs shall be retained for a period of at least thirty days and when logs are pertinent to inquiries or investigations, the logs shall be retained for longer periods until it is evident that they will no longer be required.

(8) The following information shall be entered in written logs-

(a) the name of the agency operating the station;

(b) the identification of the station;

(c) the date;

(d) the time of opening and closing the station;

(e) the signature of each operator, with the time the operator assumes and relinquishes a watch;

(f) the frequencies being guarded and type of watch being maintained on each frequency;
(g) a record of each communication, test transmission, or attempted communication showing text of communication, time communication completed, station communicated with, and frequency used;
(h) all distress communications and action;
(i) a brief description of communication conditions and difficulties, including harmful interference;
(j) a brief description of interruption to communications due to equipment failure or other troubles, giving the duration of the interruption and action taken; and
(k) such additional information as may be considered by the operator to be of value as a part of the record of the operations of the station.

32. Establishment of radio communication

(1) All stations shall answer calls directed to them by other stations in the Aeronautical Telecommunication Service and shall exchange communications on request.
(2) All stations shall radiate the minimum power necessary to ensure a satisfactory service.

33. Use of abbreviations and codes

(1) The international Aeronautical Telecommunication Service shall use abbreviations and codes whenever they are appropriate and codes shall be used to shorten or facilitate communication.
(2) The originator shall, if required by the aeronautical telecommunication station accepting the message for transmission, make available to that station a decode for the abbreviations and codes used where abbreviations and codes other than those approved by the authority are contained in the text of messages.

34. Cancellation of messages

The telecommunication station shall cancel messages when the cancellation is authorised by the message originator.

PART V - AERONAUTICAL FIXED SERVICE (AFS)

35. Systems and applications used in the Aeronautical Fixed Service

The Aeronautical Fixed Service shall comprise the following systems and applications in the International Aeronautical Telecommunication Service -

(a) Air Traffic Services direct speech circuits and networks;
(b) meteorological operational circuits, networks and broadcast systems;
(c) the Aeronautical Fixed Telecommunications Network;
(d) the Air Traffic Services message handling services; and
(e) the inter-centre communications.

36. Material permitted in Aeronautical Fixed Services messages

The material permitted in Aeronautical Fixed Services messages are specified in Schedule 1.

37. ATS direct speech circuits

Air Traffic Services direct speech communications are as specified in the Civil Aviation (Air Traffic Services) Regulations, 2019.

38. Meteorological operational channels and meteorological operational telecommunication networks

Meteorological operational channel procedures and meteorological operational communication network procedures shall be compatible with Aeronautical Fixed Telecommunications Network procedures.

Aeronautical Fixed Telecommunication Network

39. Categories of messages

Subject to Regulations 28 and 29, the following categories of message shall be handled by the Aeronautical Fixed Telecommunication Network -

(a) distress messages with priority indicator SS shall comprise those messages sent by mobile stations reporting that they are threatened by grave and imminent danger and all other messages relative to the immediate assistance required by the mobile station in distress;
(b) urgency messages with priority indicator DD shall comprise messages concerning the safety of a ship, aircraft or other vehicles or of some person on board or within sight;

(c) flight safety messages with priority indicator FF shall comprise-

(i) movement and control messages;

(ii) messages originated by an aircraft operating agency of immediate concern to aircraft in flight or preparing to depart; or

(iii) Meteorological messages restricted to SIGMET information, special air-reports, AIRMET messages, volcanic ash and tropical cyclone advisory information and amended forecasts;

(d) meteorological messages with priority indicator GG shall comprise -

(i) messages concerning forecasts; or

(ii) messages concerning observations and reports.

(e) flight regularity messages with priority indicator GG shall comprise -

(i) aircraft load messages required for weight and balance computation;

(ii) messages concerning changes in aircraft operating schedules;

(iii) messages concerning aircraft servicing;

(iv) messages concerning changes in collective requirements for passengers, crew and cargo covered by deviation from normal operating schedules;

(v) messages concerning non-routine landings;

(vi) messages concerning pre-flight arrangements for air navigation services and operational servicing for non-scheduled aircraft operations such as overflight clearance requests;

(vii) messages originated by aircraft operating agencies reporting an aircraft arrival or departure; or

(viii) messages concerning parts and materials urgently required for the operation of aircraft;

(f) aeronautical information services messages with priority indicator GG shall comprise messages concerning NOTAMs;

(g) aeronautical administrative messages with priority indicator KK shall comprise -

(i) messages regarding the operation or maintenance of facilities provided for the safety or regularity of aircraft operations;

(ii) messages concerning the functioning of aeronautical telecommunication services; or

(iii) messages exchanged between civil aviation authorities relating to aeronautical services; and

(h) service messages with priority indicator as appropriate shall comprise messages originated by Aeronautical Fixed Stations to obtain information or verification concerning other messages which appear to have been

transmitted incorrectly by the Aeronautical Fixed Service, confirming channel-sequence numbers.

40. Service messages

(1) Service messages shall be prepared in the format specified in Regulation 56.

(2) In applying the provisions of Schedule 1 to service messages addressed to an aeronautical fixed station identified only by a location indicator, the indicator shall be immediately followed by the ICAO three-letter designator YFY, followed by an appropriate 8th letter.

(3) Service messages shall be assigned the appropriate priority indicator.

(4) When service messages refer to messages previously transmitted, the priority indicator assigned shall be that used for the message to which they refer.

(5) Service messages correcting errors in transmission shall be addressed to all the addressees that shall have received the incorrect transmission.

(6) A reply to a service message shall be addressed to the station which originated the initial service message.

(7) The text of all service messages shall be concise.

(8) A service message, other than one acknowledging receipt of SS messages, shall be further identified by the use of the abbreviation "SVC" as the first item in the text.

(9) When a service message refers to a message previously handled, reference to the previous message shall be made by use of the appropriate transmission identification or the filing time and originator indicator groups identifying the reference message.

41. Order of priority

The order of priority for the transmission of messages in the Aeronautical Fixed Telecommunication Network shall be as follows-

(a) transmission priority 1 shall comprise of message with priority indicator SS;

(b) transmission priority 2 shall comprise of message with priority indicator DD and FF; and

(c) transmission priority 3 shall comprise of message with priority indicator GG and KK.

42. Same priority messages

Messages that have the same priority indicator shall be transmitted in the order in which they are received for transmission.

43. Routing of messages and supervision of message traffic

Where an Aeronautical Fixed Telecommunication Network is used, the routing of messages and supervision of message traffic is as specified in Schedule 2.

44. Failure of communications

Where an Aeronautical Fixed Telecommunication Network is used and there exists a communication failure, the requirements stipulated in the Schedule 4 shall apply.

45. Long term retention of Aeronautical Fixed Telecommunication Networks traffic records

(1) Aeronautical Fixed Telecommunication Network origin station shall retain for a period of at least 30 days, all copies of transmitted messages in their entirety.

(2) Aeronautical Fixed Telecommunication Networks destination stations shall retain, for a period of at least 30 days, a record containing the information necessary to identify all messages received and the action taken on the messages.

(3) Aeronautical Fixed Telecommunication Networks communication centres shall retain, for a period of at least 30 days, a record containing the information necessary to identify all messages relayed or retransmitted and the action taken.

46. Short term retention of Aeronautical Fixed Telecommunication Networks traffic records

(1) Aeronautical Fixed Telecommunication Networks communication centres shall retain, for a period of at least one hour, a copy of all messages, in their entirety, retransmitted or relayed by that communication centre, except as provided in sub-regulation (2).

(2) Where acknowledgement is made between Aeronautical Fixed Telecommunication Network communication centres, a relay centre shall be considered as having no further responsibility for retransmission or repetition of a message for which it has received positive acknowledgement, and it may be deleted from its records.

47. Test procedures on Aeronautical Fixed Telecommunication Networks channels

Test messages transmitted on Aeronautical Fixed Telecommunication Networks channels for the purposes of testing and repairing lines shall comprise the following -

(a) the start-of-message signal;
(b) the procedure signal QJH;
(c) the originator indicator;
(d) three page-copy lines of the sequence of characters RY in ITA-2 or U (5/5) *(2/10) in IA-5; and
(e) the end-of-message signal.

48. Message format – International Telegraph Alphabet No.2

All messages of International Telegraph Alphabet No.2 other than those prescribed in Regulation 47 and paragraph 1.10.3 of Schedule 1, shall comprise the components specified in paragraphs 1.5.1 to 1.9.1in Schedule 1.

49. Characters of Aeronautical Fixed Telecommunication Networks messages

Aeronautical Fixed Telecommunication Networks messages entered by the Aeronautical Fixed Telecommunication Networks origin station shall not exceed 2 100 characters in length.

50. Stripped address

Aeronautical Fixed Telecommunication Networks communication centre shall omit from the address all the addressee indicators not required when applying the provisions in Schedule 1 for -

(a) an onward transmission by the Aeronautical Fixed Telecommunication Networks communication centre to which the message is transmitted;
(b) local delivery to the addressee by the Aeronautical Fixed Telecommunication Networks destination station; or
(c) an onward transmission or local delivery by the aggregate of stations on a multi-point circuit.

51. Correction of errors during message origination where the message is flowing into the during preparation

(1) Messages flowing into the Aeronautical Fixed Telecommunication Networks during preparation shall not be terminated with an end-of-message signal if they contain known uncorrected errors.

(2) The unfinished message shall be cancelled by sending the sequence ↓<≡QTA→QTA↓<≡ followed by a complete ending where an error is made in any part of the message which precedes the text.

(3) Errors made in the text and noticed immediately shall be corrected by making the error sign (→E→E→E→), transmitting the last correct word or group and then continuing with the message.

(4) The station shall comply with the provision of paragraph 1.8.5 in Schedule 1 and not noticed until later in the origination process.

(5) The station shall take the action described in sub-regulation (2) where it becomes obvious, during the origination of the text, that the message is to be cancelled.

52. Predetermined distribution system for Aeronautical Fixed Telecommunication Networks messages

(1) The system described in sub-regulation (2) shall be used when it is agreed between the administrations concerned to make use of a predetermined distribution system for Aeronautical Fixed Telecommunication Networks messages.

(2) The predetermined distribution addressee indicator shall be constructed as follows -

(a) the first and second letters; the first two letters of the Location Indicator of the communications centre of the State which has agreed to implement the system and which receives messages over a circuit for which it has a predetermined routing responsibility;

(b) the third and fourth letters; the letters ZZ, indicating a requirement for special distribution;

(c) the fifth, sixth and seventh letters;

(i) the fifth, sixth and seventh letters taken from the series A to Z and denoting the national and/or international distribution list to be used by the receiving Aeronautical Fixed Telecommunication Networks centre;

(ii) "N" and "S", as the fifth letter, are reserved for NOTAM and SNOWTAM respectively;

(d) the eighth letter; either the filler letter "X" or a letter taken from the series A to Z to further define the national and international distribution list to be used by the receiving AFTN centre.

(3) Predetermined distribution addressee indicators shall be used whenever possible on Aeronautical Fixed Telecommunication Networks messages

between States which have agreed to make use of the predetermined distribution system.

(4) Aeronautical Fixed Telecommunication Networks messages carrying predetermined distribution addressee indicators allocated by the State receiving the message shall be routed to the addressees listed on the associated list of addressee indicators described in sub regulation (5).

(5) States shall send their list of selected predetermined distribution addressee indicators together with the associated lists of addressee indicators to -

(a) the States from which they receive Aeronautical Fixed Telecommunication Networks messages for predetermined distribution, to assure correct routing; and

(b) the States which originate Aeronautical Fixed Telecommunication Networks messages for predetermined distribution to facilitate the treatment of requests for retransmission and to assist originators in using the predetermined distribution addressee indicators correctly.

(6) The list of addressee indicators associated with a predetermined distribution addressee indicator shall include -

(a) addressee indicators for national distribution;

(b) addressee indicators for international distribution;

(c) predetermined distribution addressee indicators for international distribution; or

(d) any combination of lists of addressee indicators stipulated in paragraphs (a), (b) and (c).

53. Message format — International Alphabet No. 5 (IA-5)

All messages of International Telegraph Alphabet No. 5 shall comply with the format specified in Schedule 1.

54. Action taken on mutilated messages in International Telegraph Alphabet No.5 detected in computerized AFTN relay stations

The action taken on mutilated messages in International Telegraph Alphabet No.5 detected in computerized Aeronautical Fixed Telecommunication Network relay stations shall be as specified in Schedule 1.

55. Transfer of Aeronautical Fixed Telecommunication Networks messages over code and byte independent circuits and networks.

When Aeronautical Fixed Telecommunication Network messages are transferred across code and byte independent circuits and networks of the AFS, the following shall apply -

(a) the message shall start with an alignment function followed by the address, except as provided in paragraph (c), the head line of the message shall be omitted;
(b) the message shall end with a complete ending;
(c) entry centres shall be permitted to insert additional data preceding the first alignment function and following the ending of the message for the purposes of technical supervision; and
(d) where paragraph (c) is applied, the data added shall not include either carriage return or line feed characters or any of the combinations listed
(e) in Schedule 1.

56. Air Traffic Services Message Handling Services (ATS-MHS).

The Air Traffic Services Message Handling Service application shall be used to exchange air traffic services messages between users over the Aeronautical Telecommunication Network internet in accordance with Schedule 4.

57. Inter-Centre Communications

The Inter-Centre Communications applications set shall be used to exchange Air Traffic Services messages between air traffic service users over the Aeronautical Telecommunication Network internet.

PART VI - AERONAUTICAL MOBILE SERVICE — VOICE COMMUNICATIONS

58. General procedures for aeronautical Mobile Service - Voice Communications

(1) The highest standard of discipline shall be observed at all times in all aeronautical mobile service voice communications.
(2) The authority standardised phraseology shall be used in all situations for which it has been specified and when standardised phraseology cannot serve an intended transmission, plain language shall be used.

(3) The transmission of messages, other than those specified in Regulation 59 on aeronautical mobile frequencies when the aeronautical fixed services are able to serve the intended purpose, shall be avoided.

(4) In all communications, the consequences of human performance which affect the accurate reception and comprehension of messages shall be taken into consideration.

(5) Where it is necessary for an aircraft station to send signals for testing or adjustment which may interfere with the working of a neighbouring Aeronautical Station, the consent of the station shall be obtained before such signals are sent and such transmissions shall be kept to a minimum.

(6) When it is necessary for a station in the aeronautical mobile service to make test signals, either for the adjustment of a transmitter before making a call or for the adjustment of a receiver, such signals shall not continue for more than 10 seconds and shall be composed of spoken numerals in radiotelephony, followed by the radio call sign of the station transmitting the test signals and such transmissions shall be kept to a minimum.

(7) The responsibility of establishing communication shall rest with the station having traffic to transmit except as otherwise provided in these Regulations.

(8) After a call is made to the aeronautical station, a period of at least 10 seconds shall elapse before a second call is made.

(9) When an aeronautical station is called simultaneously by several aircraft stations, the aeronautical station shall decide the order in which aircraft shall communicate.

(10) In communications between aircraft stations, the duration of communication shall be controlled by the aircraft station which is receiving, subject to the intervention of an aeronautical station.

(11) Where the communications in sub-regulation (10) take place on an Air Traffic Service frequency, prior permission of the Aeronautical Station shall be obtained and such requests for permission are not required for brief exchanges.

59. Categories of messages

The categories of messages handled by the Aeronautical Mobile Service and the order of priority in the establishment of communications and the transmission of messages are prescribed in table 1.1in Schedule 5.

60. Communication related to direction finding

Communication relating to direction finding shall be handled in accordance with these Regulations.

61. Composition of flight safety messages

Flight safety messages shall comprise -

(a) movement and control messages;
(b) messages originated by an aircraft operating agency or by an aircraft, of immediate concern to an aircraft in flight;
(c) meteorological advice of immediate concern to an aircraft in flight or about to depart; or
(d) other messages concerning aircraft inflight or about to depart.

62. Composition of meteorological messages

Meteorological messages shall comprise of meteorological information to or from aircraft, other than messages specified in Regulation 61.

63. Composition of flight regularity messages

Flight regularity messages shall comprise -

(a) messages regarding the operation or maintenance of facilities essential for the safety or regularity of aircraft operation;
(b) messages concerning the servicing of aircraft;
(c) instructions to aircraft operating agency representatives concerning changes in requirements for passengers and crew caused by unavoidable deviations from normal operating schedules;
(d) messages concerning non-routine landings to be made by the aircraft;
(e) messages concerning aircraft parts and materials urgently required; or
(f) messages concerning changes in aircraft operating schedules.

64. Handling of flight regularity messages

Air Traffic Services units using direct pilot controller communication channels shall only be required to handle flight regularity messages provided the messages can be achieved without interference with their primary role and no other channels are available for the handling of such messages.

65. Handling of same priority messages

Messages that have the same priority shall be transmitted in the order in which they are received for transmission.

66. Composition of inter-pilot air-to-air communication

(1) Inter-pilot air-to-air communication shall comprise messages relating to any matter affecting safety and regularity of flight.

(2) The category and priority of the messages shall be determined on the basis of their content in accordance with Regulation 59.

67. Cancellation of messages

(1) The station transmitting the message shall instruct the receiving station to disregard the incomplete transmission if a message has not been completely transmitted when instructions to cancel are received and this shall be effected in radiotelephony by use of an appropriate phrase.

(2) When a completed message transmission is being held pending correction and the receiving station is to be informed to take no forwarding action or when delivery or onward relay cannot be accomplished, transmission shall be cancelled and this shall be effected in radiotelephony by the use of an appropriate phrase.

(3) The station cancelling a transmission shall be responsible for any further action required.

68. Radiotelephony procedures

The radiotelephony procedures for Aeronautical Mobile Service - voice communication shall be as specified in paragraph 5.2 in Schedule 2.

69. Distress and urgency Radiotelephony Communication procedures

Distress and urgency Radiotelephony Communication procedures for Aeronautical Mobile Service - Voice communication shall be as specified in paragraph 5.3 in Schedule 2.

70. Communications relating to acts of unlawful interference

The station addressed by an aircraft that's subjected to an act of unlawful interference or the first station acknowledging a call from such an aircraft, shall render all possible assistance, including notification of appropriate Air Traffic Service units and any other station, agency or person in a position to facilitate the flight

PART VIII - AERONAUTICAL RADIO NAVIGATION SERVICE

71. Composition of aeronautical radio navigation service

(1) The aeronautical radio navigation service shall comprise all types and systems of radio navigation aids in the international aeronautical service.

(2) An aeronautical radio navigation aid which is not in continuous operation shall, if practicable, be put into operation on receipt of a request from an aircraft, any controlling authority on the ground or an authorised representative of an aircraft operating agency.

(3) The request referred to in sub regulation (2) shall be made to the aeronautical station concerned on the air-ground frequency normally in use.

(4) The local aeronautical information service unit shall be furnished without delay essential information about changes in the operational status of non-visual aids as required for pre-flight briefing and dissemination in accordance with the Civil Aviation (Aeronautical Information Service) Regulations, 2019.

72. Aeronautical Radio Navigation Service Direction Finding

(1) A Direction-Finding station working alone shall give the following, as requested -

(a) true bearing of the aircraft, using the appropriate phrase;

(b) true heading to be steered by the aircraft, with no wind, to head for the Direction-Finding station using the appropriate phrase;

(c) magnetic bearing of the aircraft, using the appropriate phrase; and

(d) magnetic heading to be steered by the aircraft with no wind to make for the station, using the appropriate phrase.

(2) When Direction-Finding stations work as a network to determine the position of an aircraft, the bearings taken by each station shall be sent immediately to the station controlling the Direction-Finding network to enable the position of the aircraft to be determined.

(3) The station controlling the network specified in sub regulation (2) shall, on request, give the aircraft its position in -

(a) relation to a point of reference or in latitude and longitude, using the appropriate phrase;

(b) the true bearing of the aircraft in relation to the Direction Finding station or other specified point, using the appropriate phrase and its

distance from the direction finding station or point, using the appropriate phrase; or

(c) the magnetic heading to steer with no wind, to make for the direction-finding station or other specified point and its distance from the direction-finding station or point, using the appropriate phrases.

(4) Aircraft stations shall make requests for bearings, courses or positions, to the aeronautical station responsible or to the station controlling the direction-finding network.

(5) The aircraft station specified in sub regulation (4) shall call the aeronautical station or the Direction-Finding control station on the listening frequency and specify the type of service that is desired using the appropriate phrase.

(6) The Direction-Finding station originally called by the aircraft station shall where necessary -

(a) request transmission for direction-finding service; and

(b) indicate the frequency to be used by the aircraft station, the number of times the transmission shall be repeated, the duration of the transmission required or any special transmission requirement, as soon as the direction-finding station or group of stations are ready.

(7) An aircraft station which requests a bearing shall end the transmission by repeating its call sign in radiotelephony.

(8) The aircraft shall give a longer transmission for two periods of approximately ten seconds or alternatively provide such other signals as may be requested by the direction-finding station if the transmission specified in sub regulation (7) is too short for the direction-finding station to obtain a bearing.

(9) The direction-finding station shall request the aircraft station to repeat a transmission if not satisfied with its observation.

(10) The direction-finding station shall advise the aircraft station when a heading or bearing has been requested in the following form-

(a) the appropriate phrase;

(b) bearing or heading in degrees in relation to the Direction-Finding station, sent as three figures;

(c) class of bearing; and

(d) time of observation, if necessary.

(11) The direction finding control station, after plotting all simultaneous observations, shall determine the observed position of the aircraft and shall advise the aircraft station in the following form when a position has been requested -

(a) the appropriate phrase;

(b) the position;

(c) class of position; and

(d) time of observation.

(12) The aircraft station shall repeat back the message for confirmation or correction as soon as the aircraft station has received the bearing, heading or position.

(13) When positions are given by bearing or heading and distance from a known point other than the station making the report, the reference point shall be an aerodrome, prominent town or geographic feature.

(14) Subject to sub regulation (13), an aerodrome shall be given in preference to other places.

(15) When a large city or town is used as a reference place as specified in sub regulation (13), the bearing or heading and the distance given shall be measured from its centre.

(16) When the position is expressed in latitude and longitude, groups of figures for degrees and minutes shall-

(a) be used followed by letter N or S for latitude and the letter E or W for longitude, respectively; or

(b) use the words NORTH, SOUTH, EAST or WEST in radiotelephony.

(17) The direction-finding station estimates of the accuracy of observations, bearings and positions shall be classified as follows-

Bearings:

Class A — accurate within plus or minus 2 degrees;

Class B — accurate within plus or minus 5 degrees;

Class C — accurate within plus or minus 10 degrees;

Class D — accuracy less than Class C.

Positions:

Class A — accurate within 9.3 km (5 NM);

Class B — accurate within 37 km (20 NM);

Class C — accurate within 92 km (50 NM);

Class D — accuracy less than Class C.

(18) Direction-finding stations shall have authority to refuse to give bearings, heading or positions when conditions are unsatisfactory or when bearings do not fall within the calibrated limits of the station, stating the reason at the time of refusal.

PART IX - AERONAUTICAL BROADCASTING SERVICE

73. Broadcast material

The originator shall prepare a text of broadcast material in the form desired for transmission.

74. Frequencies and schedules

(1) The broadcast station shall make broadcasts on specified frequencies at specified times and the schedules and frequencies of all broadcasts shall be publicised in appropriate documents.

(2) Where the broadcast station makes a change in frequencies or times the change shall -

(a) be publicised by NOTAM at least two weeks in advance of the change; and

(b) be announced on all regular broadcasts for 48 hours preceding the change and be transmitted once at the beginning and once at the end of each broadcast where practicable.

(3) Scheduled broadcasts other than sequential collective type broadcasts, shall be started at the scheduled time by the general call.

(4) A short notice shall be transmitted at the scheduled time advising recipients to “stand by” and stating the approximate number of minutes of delay if a broadcast is to be delayed.

(5) The broadcast shall not be started until the end of the standby period as defined in sub regulation (4).

(6)) Transmission shall be terminated by each station promptly at the end of the allotted time period whether or not transmission of all material has been completed where broadcasts are conducted on a time allotment basis.

(7) In sequential collective type broadcasts each station shall be ready to commence its broadcasts at the designated time and if for any reason a station does not commence its broadcast at the designated time, the station immediately following in sequence shall wait and then commence its broadcast at its own designated time.

75. Interruption of service

(1) A broadcast shall be made by another station, if possible, in the event of interruption of service at the station responsible for broadcast, until normal service is resumed.

(2) Where the broadcast in sub-regulation (1) is not possible, and the broadcast is of the type intended for interception by fixed stations, the stations which are required to copy the broadcasts shall continue to listen on the specified frequencies until normal service is resumed.

76. Radiotelephone broadcast procedures

The Aeronautical Broadcasting Service shall comply with radiotelephone broadcast procedures specified in paragraph 7.2 in Schedule 2.

PART X - AERONAUTICAL MOBILE SERVICE — DATA LINK COMMUNICATIONS

77. Composition of data link messages

The composition of data link messages for Aeronautical Mobile Service – data link communication shall be as specified in paragraph 8.1.1 in Schedule 2.

78. Display of data link messages

(1) Ground and airborne systems shall allow for messages to be appropriately displayed, printed when required and stored in a manner that permits timely and convenient retrieval.

(2) The English language shall be displayed as a minimum whenever textual presentation is required.

79. Controller Pilot Data Link Communication procedures

The Controller Pilot Data Link Communication procedures in aeronautical mobile service – data link communication are as specified in paragraph 8.2 in Schedule 2.

PART VI -EXEMPTIONS

80. Requirements for application for exemption.

(1) A person may apply to the authority for an exemption from any provision of these Regulations.

(2) Except for an emergency, a person requiring exemptions from any of these regulations shall make an application 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 accompanied by a fee prescribed by the authority.

81. Review and publication

(1) The authority shall review the application for exemption made under regulation 80 for accuracy and compliance and if the application is satisfactory, 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 daily newspaper with nationwide circulation.

(2) Where application requirements have not been fully complied with, the authority shall request the applicant in writing, to comply 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 as soon as possible after processing the application.

82. Evaluation of the request.

(1) Where the application requirements have been satisfied, the authority shall conduct an evaluation of the request to include-

(a) determination of whether an exemption would be in the public interest;

(b) 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 Authority's 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) The authority shall publish the summary in aeronautical information circular if the exemption affects a significant population of the aviation community of Uganda.

PART VII - GENERAL PROVISIONS

83. 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) not be issued any license, certificate, rating, qualification, or authorisation issued under these Regulations for a period of up to one year from the date of that refusal; or

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

(3) A person convicted for the violation of any law 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) not be issued 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.

84. Change of name.

(1) A CNSP holding a certificate issued under these Regulations may apply to the authority for—

(a) replacement of the certificate if the certificate is lost or destroyed;

(b) change of name on the certificate; or

(c) an endorsement on the certificate

(2) The holder of a certificate shall submit to the authority—

(a) a copy of the original in case of loss; and

(b) a court order or other legal document verifying the change of name.

(3) The authority shall return to the holder of a certificate, with the appropriate changes applied for and if any, the original certificate specified in sub regulation (2), but where necessary, retain copies of the certificate.

85. 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.

86. 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.

87. 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 purpose 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 therein, required by or under these Regulations to be maintained, or knowingly make, or procure or assist in the making of, any false entry in any such record, or willfully 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 or she has satisfied himself or herself that all statements in the certificate are correct and that the applicant is qualified to hold that certificate.

88. Reports of violation

(1) A person who knows of a violation of this Act or any Regulations, rules, or orders issued there under, shall report the violation to the authority.

(2) The authority may determine the nature and type of investigation or enforcement action to be taken.

89. Failure to comply with direction

A person who fails to 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 contravened that provision.

90. 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 purpose 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 sub-regulation (1), the applicant shall pay the prescribed fee before the application is accepted.

(3) If, after that payment is made, the application is withdrawn by the applicant or otherwise ceases to have effect or is refused, the authority shall not refund the payment made.

PART VIII - OFFENCES AND PENALTIES

91. Contravention of Regulations.

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

92. Penalties.

(1) A person who contravenes any provision of these Regulations, orders, notices or proclamations made there under 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 one million shillings or to imprisonment for a term not more than six months or to both.

(3) If it is proved that an act or omission of a person, which would otherwise have been a contravention by that person of a provision of these Regulations, orders, notices or proclamations made there under was due to any cause not avoidable by the exercise of reasonable care by that person, the act or omission shall be deemed not to be a contravention by that person of that provision.

93. Appeal

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

SCHEDULE 1

1.1 MATERIAL PERMITTED IN AFS MESSAGES

1.1.1 The following characters are allowed in text messages:

Letters: ABCDEFGHIJKLMNOPQRSTUVWXYZ

Figures: 1 2 3 4 5 6 7 8 9 0

Other signs: - (hyphen)

? (question mark)
: (colon)
((open bracket)
) (close bracket)
. (full stop, period, or decimal point)
, (comma)
’ (apostrophe)
= (double hyphen or equal sign)
/ (oblique)
+ (plus sign)

Characters other than those listed above shall not be used in messages unless absolutely necessary for understanding of the text. When used, they shall be spelled out in full.

1.1.2 For the exchange of messages over the teletypewriter circuits, the following characters of International Alphabet No. 5 (IA-5) shall be permitted-

— characters 0/1 to 0/3, 0/7 — in the priority alarm (*see* 4.4.15.2.2.5), 0/10, 0/11;
— in the ending sequence (*see* 4.4.15.3.12.1), 0/13;
— characters 2/0, 2/7 to 2/9, 2/11 to 2/15;
— characters 3/0 to 3/10, 3/13, 3/15;
— characters 4/1 to 4/15;
— characters 5/0 to 5/10; and
— character 7/15.

Note. — The foregoing provisions of 4.1.2.3 are not intended to prevent the use of the full IA-5 after agreement between the Administrations concerned.

1.1.3 Roman numerals shall not be employed. If the originator of a message wishes the addressee to be informed that roman figures are intended, the arabic figure or figures shall be written and preceded by the word ROMAN.

1.1.4 Messages using IA-5 shall not contain-

(1) character 0/1 (SOH) other than the one in the heading as prescribed in 4.4.15.1.1 a);

(2) character 0/2 (STX) other than the one in the origin line as prescribed in 4.4.15.2.2.7;

(3) character 0/3 (ETX) other than the one in the ending as prescribed in 4.4.15.3.12.1;

(4) any uninterrupted sequence of characters 5/10, 4/3, 5/10, 4/3 in this order (ZCZC);

(5) any uninterrupted sequence of characters 2/11, 3/10, 2/11, 3/10 in this order (+:+:);

(6) any uninterrupted sequence of four times character 4/14 (NNNN); and

(7) any uninterrupted sequence of four times character 2/12 (,,,,).

1.1.5 The text of messages shall be drafted in plain language or in abbreviations and codes, as prescribed in Regulation 29. The originator shall avoid the use of plain language when reduction in the length of the text by appropriate abbreviations and codes is practicable. Words and phrases which are not essential, such as expressions of politeness, shall not be used.

1.1.6 If the originator of a message wishes alignment functions [<≡] to be transmitted at specific places in the text part of such message, the sequence [<≡] shall be written on each of those places.

SCHEDULE 2

1.1 ROUTING OF MESSAGES

1.1.1 All communications shall be routed by the most expeditious route available to effect delivery to the addressee.

1.1.2 Predetermined diversion routing arrangements shall be made, when necessary, to expedite the movement of communication traffic. Each communication centre shall have the appropriate diversion routing lists, agreed to by the Administration(s) operating the communication centres affected and shall use them when necessary.

1.1.2.1 Diversion routing shall be initiated:

(1) in a fully automatic communication centre:

(a) immediately after detection of the circuit outage, when the traffic is to be diverted via a fully automatic communication centre;

(b) within a 10-minute period after detection of the circuit outage, when the traffic is to be diverted via anon-fully automatic communication centre;

(2) in a non-fully automatic communication centre within a 10-minute period after detection of the circuit outage.

Service message notification of the diversion requirement shall be provided where no bilateral or multilateral prearranged agreements exist.

1.1.3 As soon as it is apparent that it will be impossible to dispose of traffic over the aeronautical fixed service within a reasonable period, and when the traffic is held at the station where it was filed, the originator shall be consulted regarding further action to be taken, unless:

(a) otherwise agreed between the station concerned and the originator; or

(b) arrangements exist whereby delayed traffic is automatically diverted to commercial telecommunication services without reference to the originator.

Note. — The expression "reasonable period" means a period of time such that it seems probable that the traffic will not be delivered to the addressee within any fixed transit period applicable to the category of traffic concerned, or, alternatively, any predetermined period agreed between originators and the telecommunication station concerned.

1.2 *Supervision of message traffic*

1.2.1 *Continuity of message traffic*. The receiving station shall check the transmission identification of incoming transmissions to ensure the correct sequence of channel sequence numbers of all messages received over that channel.

1.2.1.1 When the receiving station detects that one or more channel-sequence numbers are missing, it shall send a complete service message to the previous station rejecting receipt of any message that may have been transmitted with such missing number(s). The text of this service message shall comprise the signal QTA, the procedure signal MIS followed by one or more missing transmission.

Note. — The following examples illustrate application of the above-mentioned procedure. In example 2) the hyphen (-) separator is understood to mean "through" in plain language.

(1) when one channel-sequence number is missing:

SVC→QTA→MIS→ABC↑123↓<≡

(2) when several channel-sequence numbers are missing:

SVC→QTA→MIS→ABC↑123-126↓<≡

1.2.1.1.1 When the provisions of 1.2.1.1 are applied, the station notified of the missing message(s) condition by the service message shall reassume its responsibility for transmission of the message (or messages) that it had previously transmitted with the transmission identification concerned, and shall retransmit that message (or those messages) with a new (correct in sequence) transmission identification. The receiving station shall synchronize such that the next expected channel-sequence number is the last received channel-sequence number plus one.

1.2.1.2 When the receiving station detects that a message has a channel sequence number less than that expected, it shall advise the previous station using a service message with a text comprising:

(1) the abbreviation SVC;

(2) the procedure signal LR followed by the transmission identification of the received message;

(3) the procedure signal EXP followed by the transmission identification expected;

(4) the end-of-text signal.

Note. — The following example illustrates application of the above-mentioned procedure:

SVC→LR→ABC↑123→↓EXP→ABC↑135↓<≡

1.2.1.2.1 When the provisions of 1.2.1.2 are applied, the station receiving the out-of sequence message shall synchronize such that the next expected channel-sequence number is the last received channel-sequence number plus one. The previous station shall check its outgoing channel-sequence numbers and, if necessary, correct the sequence.

1.2.2 *Misrouted messages*

Note. — A message is considered to have been misrouted when it contains no relaying instructions, expressed or implied, on which the receiving station can take action.

1.2.2.1 When the receiving station detects that a message has been misrouted to it, it shall either:

(1) send a service message to the previous station rejecting receipt of the misrouted message; or

(2) itself assume responsibility for transmission of the message to all addressee indicators.

Note. — The procedure of 1) is preferable at stations using "torn-tape" relay methods or a semi-automatic relay technique with continuous tape. The procedure

of 2) may be preferred at stations using fully automatic relay methods or a semi-automatic relay technique without continuous tape.

1.2.2.2 When the provisions of 1.2.2.1) are applied, the text of the service message shall comprise the abbreviation SVC, the signal QTA, the procedure signal MSR followed by the transmission identification and of the misrouted message and the end-of-text signal.

Note. — The following example illustrates application of the above-mentioned procedure:

SVC→QTA→MSR→ABC↑123↓<≡

1.2.2.3 When, as a result of the provisions of 1.2.2.2, a sending station is notified of the misrouted message condition by service message, it shall reassume its responsibility for the message and shall retransmit as necessary on the correct outgoing channel or channels.

1.2.3 When a circuit becomes interrupted and alternative facilities exist, the last channel-sequence numbers sent and received shall be exchanged between the stations concerned. Such exchanges shall take the form of complete service messages with the text comprising the abbreviation SVC, the procedure signals LR and LS followed by the transmission identifications of the relevant messages and the end-of-text signal.

Note. — The following example illustrates application of the above-mentioned procedure:

SVC→LR→ABC↑123↓→LS→BAC↑321↓<≡

1.3 Failure of communications

1.3.1 Should communication on any fixed service circuit fail, the station concerned shall attempt to re-establish contact as soon as possible.

1.3.2 If contact cannot be re-established within a reasonable period on the normal fixed service circuit, an appropriate alternative circuit shall be used. Attempts shall

be made to establish communication on any authorized fixed service circuit available.

1.3.2.1 If these attempts fail, use of any available air-ground frequency shall be permitted only as an exceptional and temporary measure when no interference to aircraft in flight is ensured.

1.3.2.2 Where a radio circuit fails due to signal fadeout or adverse propagation conditions, a receiving watch shall be maintained on the regular fixed service frequency normally in use. In order to re-establish contact on this frequency as soon as possible there shall be transmitted:

(a) the procedure signal DE;

(b) the identification of the transmitting station transmitted three times;

(c) the alignment function [<≡];

(d) the letters RY repeated without separation for three lines of page copy;

(e) the alignment function [<≡];

(f) end-of-message signal (NNNN). The foregoing sequence shall be repeated as required.

1.3.2.3 A station experiencing a circuit or equipment failure shall promptly notify other stations with which it is in direct communication if the failure will affect traffic routing by those stations. Restoration to normal shall also be notified to the same stations.

1.3.3 Where diverted traffic will not be accepted automatically or where a predetermined diversion routing has not been agreed, a temporary diversion routing shall be established by the exchange of service messages. The text of such service messages shall comprise:

(1) the abbreviation SVC;

(2) the procedure signal QSP;

(3) if required, the procedure signal RQ, NO or CNL to request, refuse or cancel a diversion;

(4) identification of the routing areas, States, territories, locations, or stations for which the diversion applies;

(5) the end-of-text signal.

Note. — The following examples illustrate application of the above-mentioned procedures:

(*a) to request a diversion:*
SVC→QSP→RQ→C→K→BG→BI↓<≡
(*b) to accept a diversion:*
SVC→QSP→C→K→BG→BI↓<≡
(*c) to refuse a diversion:*
SVC→QSP→NO→C→K→BG→BI↓<≡
(*d) to cancel a diversion:*
SVC→QSP→CNL→C→K→BG→BI↓<≡

SCHEDULE 3

1.0 MESSAGE FORMAT — INTERNATIONAL ALPHABET NO. 5 (IA-5)

1.1 When it has been agreed between the Administrations concerned to use International Alphabet No. 5 (IA-5) the format described in 1.1 through 1.3 shall be used. All messages, other than those prescribed in regulation 47 and 1.1.5 shall comprise the components specified in 1.1.1 to 1.1.6 inclusive.

Note 1. — An illustration of the IA-5 message format is given in Figure 1-1.

Note 2. — In the subsequent standards relative to message format the following symbols have been used in making reference to the functions assigned to certain signals in IA-5. Symbol Signification
< CARRIAGE RETURN (character position 0/13)
≡ LINE FEED (character position 0/10)
→ SPACE (character position 2/0).

1.1.1 *Heading*

1.1.1.1 The heading shall comprise:

(a) start-of-heading (SOH) character 0/1;

(b) transmission identification comprising:

(i) circuit or link identification;

(ii) channel-sequence number;

(c) additional service information (if necessary) comprising:

(i) one SPACE;

(ii) no more than 10 characters.

1.1.1.1.1 In point-to-point circuits or links, the identification shall consist of three letters selected and assigned by the transmitting station; the first letter identifying the transmitting, the second letter the receiving end of the circuit, and the third letter the channel. Where only one channel exists, the letter A shall be assigned.

Where more than one channel between stations is provided, the channels shall be identified as A, B, C, etc., in respective order. On multipoint channels, the identification shall consist of three letters selected and assigned by the circuit control or master station.

1.1.1.1.2 Except as provided in 1.1.1.3 three-digit channel-sequence numbers from 001 to 000 (representing 1 000) shall be assigned sequentially by telecommunication stations to all messages transmitted directly from one station to another. A separate series of these numbers shall be assigned for each channel and a new series shall be started daily at 0000 hours.

1.1.1.1.3 The expansion of the channel-sequence number to preclude duplication of the same numbers during the 24-hour period shall be permitted subject to agreement between the Authorities responsible for the operation of the circuit.

1.1.1.1.4 The transmission identification shall be sent over the circuit in the following sequence-

(a) transmitting-terminal letter;

(b) receiving-terminal letter;

(c) channel-identification letter;

(d) channel-sequence number.

1.1.1.1.5 Additional service information shall be permitted to be inserted following the transmission identification subject to agreement between the Authorities responsible for the operation of the circuit. Such additional service information shall be preceded by a SPACE (→) followed by not more than 10 characters inserted into the heading of message immediately following the last digit of the channel-sequence number and shall not contain any alignment functions. When no such additional service information is added the information in 1.11.1.4 shall be followed immediately by that of 1.1.2.

1.1.2 *Address*

1.1.2.1 The address shall comprise:

(a) alignment function [<≡];

(b) priority indicator;
(c) addressee indicator(s);
(d) alignment function [<≡].

1.1.2.1.1 The priority indicator shall consist of the appropriate two-letter group assigned by the originator in accordance with the following:

Message part		*Component of the message part*	*Elements of the component*	*Teletypewriter character*
THE HEADING	HEADING LINE (see 4.4.15.1.1)	Start-of-Heading Character	One Character (0/1)	SOH
		Transmission Identification	a) Transmitting-terminal letter b) Receiving-terminal letter c) Channel-identification letter d) Channel-sequence number } (*Example:* NRA062)	.....
		(*If necessary*) Additional Service Indication	a) One SPACE b) No more than the remainder of the line } (*Example:* 270930)	→
	ADDRESS (see 4.4.15.2.1)	Alignment Function	One CARRIAGE RETURN, one LINE FEED	<≡
		Priority Indicator	The relevant 2-letter group	..
		Addressee Indicator(s)	One SPACE An 8-letter group } given in sequence for each addressee (*Example:* **EGLLZRZX→EGLLYKYX→EGLLACAD**)	
		Alignment Function(s)	One CARRIAGE RETURN, one LINE FEED	<≡
	ORIGIN (see 4.4.15.2.2)	Filing Time	6-digit date-time group specifying when the message was filed for transmission	.....
		Originator Indicator	a) One SPACE b) 8-letter group identifying the message originator	→.....
		Priority Alarm (*used only in teletypewriter operation for Distress Messages*)	Five characters (0/7)(BEL)	
		Optional Heading Information	a) One SPACE b) Additional data not to exceed the remainder of the line. See 4.4.15.2.2.6.	
		Alignment Function	One CARRIAGE RETURN, one LINE FEED	<≡
		Start-of-Text Character	One character (0/2)	STX
TEXT (see 4.4.15.3)		Beginning of the Text	Specific identification of Addressee(s) *(if necessary)* *with* each followed by one CARRIAGE RETURN, one LINE FEED *(if necessary)* The English word FROM *(if necessary)*(see 4.4.15.3.5) Specific identification of Originator *(if necessary)* The English word STOP followed by one CARRIAGE RETURN, one LINE FEED *(if necessary)* (see 4.4.15.3.5) *and/or* Originator's reference *(if used)*	
		Message Text	Message Text with one CARRIAGE RETURN, one LINE FEED at the end of each printed line of the Text except for the last one (see 4.4.15.3.6)	
		Confirmation *(if necessary)*	a) One CARRIAGE RETURN, one LINE FEED b) The abbreviation CFM followed by the portion of the Text being confirmed.	
		Correction *(if necessary)*	a) One CARRIAGE RETURN, one LINE FEED b) The abbreviation COR followed by the correction of an error made in the preceding Text	
ENDING (see 4.4.15.3.12.1)		Alignment Function	One CARRIAGE RETURN, one LINE FEED	<≡
		Page-feed Sequence	One character (0/11)	VT
		End-of-Text character	One character (0/3)	ETX

Figure 1-1. Message format International Alphabet No. 5 (IA-5)

Priority indicator	***Message category***
SS	distress messages

DD urgency messages
FF flight safety messages
GG meteorological messages
GG flight regularity messages
GG aeronautical information services messages
KK aeronautical administrative messages) as appropriate service messages

1.1.2.1.2 The order of priority shall be the same as specified in regulation 41.

1.1.2.1.3 An addressee indicator, which shall be immediately preceded by a SPACE, except when it is the first address indicator of the second or third line of addresses, shall comprise-

(a) the four-letter location indicator of the place of destination;

(b) the three-letter designator identifying the organization or function (aeronautical authority, service or aircraft operating agency) addressed;

(c) an additional letter, which shall represent a department, division or process within the organization/function addressed. The letter X shall be used to complete the address when explicit identification is not required.

1.1.2.1.3.1 Where a message is to be addressed to an organization that has not been allocated an ICAO three-letter designator of the type prescribed in 4.4.15.2.1.3 the location indicator of the place of destination shall be followed by the ICAO three-letter designator YYY (or the ICAO three-letter designator YXY in the case of a military service or organization). The name of the addressee organization shall then be included in the first item in the text of the message. The eighth position letter following the ICAO three-letter designator YYY or YXY shall be the filler letter X.

1.1.2.1.3.2 Where a message is to be addressed to an aircraft in flight and, therefore, requires handling over the AFTN for part of its routing before retransmission over the Aeronautical Mobile Service, the location indicator of the aeronautical station which is to relay the message to the aircraft shall be followed by the ICAO three-letter designator ZZZ. The identification of the aircraft shall then be included in the first item of the text of the message. The eighth position letter following the ICAO three-letter designator ZZZ shall be the filler letter X.

1.1.2.1.4 The complete address shall be restricted to three lines of page-printing copy, and, except as provided in 4.4.16, a separate addressee indicator shall be used for each addressee whether at the same or different locations.

1.1.2.1.5 The completion of the addressee indicator group(s) in the address of a message shall be immediately followed by the alignment function.

1.1.2.1.6 Where messages are offered in page-copy form for transmission and contain more addressee indicators than can be accommodated on three lines of a page copy, such messages shall be converted, before transmission, into two or more messages, each of which shall conform with the provisions of 1.1.2.1.5. During such conversion, the addressee indicators shall, in so far as practicable, be positioned in the sequence which will ensure that the minimum number of retransmissions will be required at subsequent communication
centres.

1.1.2.2 ***Origin***

The origin shall comprise-

(a) filing time;

(b) originator indicator;

(c) priority alarm (when necessary);

(d) optional heading information;

(e) alignment function [<≡];

(f) start-of-text character, character 0/2 (STX).

1.1.2.2.1 The filing time shall comprise the 6-digit date-time group indicating the date and time of filing the message for transmission.

1.1.2.2.2 The originator indicator, which shall be immediately preceded by a SPACE, shall comprise-

(a) the four-letter location indicator of the place at which the message is originated;

(b) the three-letter designator identifying the organization/ function (aeronautical authority, service or aircraft operating agency) which originated the message;

(c) an additional letter which shall represent a department, division or process within the organization/function of the originator. The letter X shall be used to complete the address when explicit identification is not required.

1.1.2.2.3 Where a message is originated by an organization that has not been allocated an ICAO three-letter designator of the type prescribed in 1.2.2.2, the location indicator of the place at which the message is originated shall be followed immediately by the ICAO three-letter designator YYY followed by the filler letter X (or the ICAO three-letter designator YXY followed by the filler letter X in the case of a military service or organization). The name of the organization (or military service) shall then be included in the first item in the text of the message.

1.1.2.2.3.1 Messages relayed over the AFTN that have been originated in other networks shall use a valid AFTN originator indicator that has been agreed for use by the relay or gateway function linking the AFTN with the external network.

1.1.2.2.4 Where a message originated by an aircraft in flight requires handling on the AFTN for part of its routing before delivery, the originator indicator shall comprise the location indicator of the aeronautical station responsible for transferring the message to the AFTN, followed immediately by the ICAO three-letter designator ZZZ followed by the filler letter X. The identification of the aircraft shall then be included in the first item in the text of the message.

1.1.2.2.5 The priority alarm shall be used only for distress messages. When used it shall consist of five successive BEL (0/7) characters.

Note. — Use of the priority alarm will actuate a bell (attention) signal at the receiving teletypewriter station, other than at those fully automatic stations which may provide a similar alarm on receipt of priority indicator SS, thereby alerting supervisory personnel at relay centres and operators at tributary stations, so that immediate attention may be given to the message.

1.1.2.2.6 The inclusion of optional data in the origin line shall be permitted provided a total of 69 characters is not exceeded and subject to agreement between the Administrations concerned. The presence of the optional data field shall be

indicated by one occurrence of the SPACE character immediately preceding optional data.

1.1.2.2.6.1 When additional addressing information in a message needs to be exchanged between source and destination addresses, it shall be conveyed in the optional data field (ODF), using the following specific format-

(a) characters one and full stop (1.) to indicate the parameter code for the additional address function;

(b) three modifier characters, followed by an equal sign (=) and the assigned 8-character ICAO address; and

(c) the character hyphen (-) to terminate the additional address parameter field.

1.13.2.2.6.1.1. When a separate address for service messages or inquiries is different from the originator indicator, the modifier SVC shall be used.

1.1.2.2.7 The origin line shall be concluded by an alignment function [<≡] and the start-of-text (STX) (0/2) character.

1.1.3 *Text*

1.1.3.1 The text of messages shall be drafted in accordance with 1.1 and shall consist of all data between STX and ETX.

Note. — When message texts do not require conversion to the ITA-2 code and format and do not conflict with ICAO message types or formats in PANS-ATM (Doc 4444), Administrations may make full use of the characters available in International Alphabet No. 5 (IA-5).

1.1.3.2 When an originator's reference is used, it shall appear at the beginning of the text, except as provided in 1.1.3.2 and 1.1.3.4.

1.1.3.3 When the ICAO three-letter designators YXY, YYY or ZZZ comprise the second element of the addressee indicator and it, therefore, becomes necessary to identify in the text the specific addressee of the message, such identification group shall precede the originator's reference (if used) and become the first item of the text.

1.1.3.4 When the ICAO three-letter designators YXY, YYY or ZZZ comprise the second element of the originator indicator and it thus becomes necessary to identify in the text the name of the organization (or military service) or the aircraft which originated the message, such identification shall be inserted in the first item of the text of the message.

1.1.3.5 When applying the provisions of 1.1.3.3 and 1.1.3.4 to messages where the ICAO three-letter designator(s) YXY, YYY, ZZZ refer to two or more different organizations (or military services), the sequence of further identification in the text shall correspond to the complete sequence used in the address and originator indicator of the message. In such instance, each addressee identification shall be followed immediately by an alignment function. The name of the (YXY, YYY or ZZZ) organization originating the message shall then be preceded with "FROM". "STOP" followed by an alignment function shall then be included in the text at the end of this identification and preceding the remainder of text.

1.1.3.6 An alignment function shall be transmitted at the end of each printed line of the text. When it is desired to confirm a portion of the text of a message in teletypewriter operation, such confirmation shall be separated from the last text group by an alignment function [<≡], and shall be indicated by the abbreviation CFM followed by the portion being confirmed.

1.1.3.7 Where messages are prepared off-line, e.g. by preparation of a paper tape, errors in the text shall be corrected by backspacing and replacing the character in error by character DEL (7/15).

1.1.3.8 Corrections to textual errors made in on-line operations shall be corrected by inserting →E→E→E→ following the error, then retyping the last correct word (or group).

1.1.3.9 When it is not discovered until later in the origination process that an error has been made in the text, the correction shall be separated from the last text group, or confirmation, if any, by an alignment function [<≡]. This shall be followed by the abbreviation COR and the correction.

1.1.3.10 Stations shall make all indicated corrections on the page-copy prior to local delivery or a transfer to a manually operated circuit.

1.1.3.11 The text of messages entered by the AFTN origin station shall not exceed 1 800 characters in length. AFTN messages exceeding 1 800 characters shall be entered by the AFTN origin station in the form of separate messages. Guidance material for forming separate messages from a single long message is given in Attachment B to Volume II. When messages or data are transmitted only on medium or high speed circuits the text may be increased to a length that exceeds 1 800 characters as long as performance characteristics of the network or link are not diminished and subject to agreement between the Administrations concerned.

Note. — The character count includes all printing and nonprinting characters in the text from, but not including, the start-of-text signal to, but not including, the first alignment function of the ending.

1.1.3.12 ***Ending***

1.1.3.12.1 The ending of a message shall comprise the following in the order stated -

(a) an alignment [<≡] function following the last line of text;

(b) page-feed character, character 0/11 (VT);

(c) end-of-text character 0/3 (ETX).

1.1.3.12.1.1 Station terminal equipment (page printers) on the International Alphabet Number 5 (IA-5) shall be provided with a capability to generate sufficient line feed functions for local station use upon the reception of a VERTICAL TAB character (0/11).

1.1.3.12.1.2 . When the message does not transit ITA-2 portions of the AFTN, or where Administrations have made provisions to add automatically the second carriage return before transmission to an ITA-2 circuit, one carriage return in the alignment function and end-of-line function shall be permitted subject to agreement between the Administrations concerned.

1.1.3.12.1.3 Messages entered by the AFTN origin station shall not exceed 2 100 characters in length.

Note. — The character count includes all printing and nonprinting characters in the message from and including the start-of-heading character (SOH) to and including the end-of text character.

1.1.4 Except as provided in 1.1.5 to 1.1.6 and 116, the procedures of 4.4.8 and 4.4.9 to 4.4.13 shall be used for messages using IA-5 code.

1.1.5 *Channel-check transmissions.* In the case where continuous control of channel condition is not provided the following periodic transmissions shall be sent on teletypewriter circuits-

(a) heading line; S

(b) alignment function T; X

(c) the procedure signal CH; E

(d) alignment function T. X

The receiving station shall then check the transmission identification of this incoming transmission to ensure its correct sequence in respect of all messages received over that incoming channel.

Note. — Application of this procedure provides some measure of assurance that channel continuity is maintained; however, a continuously controlled channel is much more preferable in that data integrity can also be improved.

1.1.5.1 Where a circuit is unoccupied and uncontrolled, the transmission identified in 1.1.5 shall be sent at H + 00, H + 20, H + 40.

1.1.6 The receipt of distress messages (priority indicator SS, *see* 4.4.1.1.1) shall be individually acknowledged by the AFTN destination station by sending a service message (*see* 4.4.1.1.9) to the AFTN origin station. Such acknowledgement of receipt shall take the format of a complete message addressed to the AFTN origin station, shall be assigned priority indicator SS and the associated priority alarm, and shall have a text comprising:

(a) the procedure signal R;

(b) the origin line without priority alarm, or optional heading information of the message being acknowledged;

(c) the ending.

Note. — The following example illustrates the application of the 1.6 procedures:

Heading
<≡ SS → LECBZRZX <≡
121322 → EGLLYFYX (Priority Alarm) <≡ S
TR → 121319 → LECBZRZX <≡ X
Ending (*see* 4.4.15.3.12.1).

1.2 Action taken on mutilated messages in IA-5 detected in computerized AFTN relay stations

1.2.1 On channels employing continuous control the mutilation detection and subsequent recovery shall be a function of the link control procedures and shall not require the subsequent sending of service or CHECK TEXT NEW ENDING ADDED messages.

1.2.2 On channels not employing continuous control the relay station shall employ the following procedures:

1.2.2.1 If, during the reception of a message a relay station detects that the message has been mutilated at some point ahead of the end-of-text character, it shall-

(a) cancel the onward routing responsibility for the message;

(b) send a service message to the transmitting station requesting a retransmission.

Note. — The following example illustrates a typical text of a service message in which the foregoing procedure has been applied in respect of a mutilated message:

SVC→QTA→RPT→ABC 123 (ending — *see* 1.1.3.12.1)

1.2.2.2 When the provisions of 1.2.2.1 are applied, the station receiving the service message shall reassume responsibility for the referenced message with a new (i.e. correct in sequence) transmission identification. If that station is not in possession of an unmutilated copy of the original message, it shall send a message to the originator as identified by the originator indicator in the origin of the mutilated message, requesting repetition of the incorrectly received message.

Note. — The following example illustrates a typical text of a service message in which the foregoing procedure has been applied in respect of a mutilated message having as its origin "141335 CYULACAX":
SVC→QTA→RPT→141335→CYULACAX (ending — *see* 4.4.15.3.12.1)

1.2.3 If, after transmission of the text material of a message, a relay station can detect that there is no complete end-of-text character, but has no practical means of discovering whether the irregularity has affected only the end-of-text character, or whether it has also caused part of the original text to have been lost, it shall insert into the channel the following-

(a) <≡CHECK≡TEXT≡ NEW→ENDING→ADDED

(b) its own station identification;

(c) (ending — *see* 4.4.15.3.12.1).

1.3 Transfer of AFTN messages over code and byte independent circuits and networks.

When AFTN messages are transferred across code and byte independent circuits and networks of the AFS, the following shall apply.

1.3.1 Except as provided in 4.4.17.3 the heading line of the message shall be omitted. The message shall start with an alignment function followed by the address.

1.3.2 The message shall end with a complete ending.

1.3.3 For the purposes of technical supervision, entry centres shall be permitted to insert additional data preceding the first alignment function and/or following the ending of the message.

1.3.3.1 When the provisions of 4.4.17.3 are applied, the data added shall not include either carriage return or line feed characters or any of the combinations listed in 4.1.2.4.

SCHEDULE 4

1.4 ATS MESSAGE HANDLING SERVICES (ATSMHS) AND INTER-CENTRE COMMUNICATIONS (ICC)

1.5 ATS MESSAGE HANDLING SERVICES (ATSMHS)

The ATS message service of the ATS (air traffic services) message handling service (ATSMHS) application shall be used to exchange ATS messages between users over the aeronautical telecommunication network (ATN) internet.

Note 1. — The ATS message service comprised in the ATS message handling service application aims at providing generic message services over the ATN internet communication service (ICS). It may, in turn, be used as a communication system by user-applications communicating over the ATN. This may be achieved, for example, by means of application programme interfaces to the ATS message service.

Note 2. — The detailed specification of the ATS message handling service application is included in the Manual of Technical Provisions for the Aeronautical Telecommunication Network (ATN) *(Doc 9705), Sub-volume III.*

Note 3.— The ATS message service is provided by the implementation over the ATN internet communication service of the message handling systems specified in ISO/IEC (International Organization for Standardization/International Electro technical Commission) 10021 and ITU-T (International Telecommunication Union — Telecommunication Standardization Sector) X.400 and complemented by the additional requirements specified in the Manual of Technical Provisions for the Aeronautical Telecommunication Network (ATN) *(Doc 9705). The two sets of documents, the ISO/IECMOTIS (Message-Oriented Text Interchange System) International Standards and the ITU-T X.400 Series of Recommendations (1988 or later) are, in principle, aligned with each other. However, there are a small number of differences. In the above-mentioned document, reference is made to the relevant ISO International Standards and International Standardized Profiles (ISP), where applicable. Where necessary, e.g. for reasons of interworking or to point out differences, reference is also made to the relevant X.400 Recommendations.*

Note 4. — The following types of ATN end systems performing ATS message handling services are defined in the Manual of Technical Provisions for the Aeronautical Telecommunication Network (ATN) *(Doc 9705), Sub-volume III-*

(*a) an ATS message server;*

(*b) an ATS message user agent;*

(*c) an AFTN/AMHS gateway (aeronautical fixed telecommunication network/ATS message handling system); and*

(*d) a CIDIN/AMHS gateway (common ICAO data interchange network/ATS message handling system).*

Connections may be established over the internet communications service between any pair constituted of these ATN end systems (see Table 4-1).

1.6 Inter-Centre Communications (ICC)

The inter-centre communications (ICC) applications set shall be used to exchange ATS messages between air traffic service users over the ATN internet.

Note 1. — The ICC applications set enables the exchange of information in support of the following operational services:

(*a) flight notification;*

(*b) flight coordination;*

(*c)transfer of control and communications;*

Table 4-1. Communications between ATN end systems implementing ATS message handling services

ATN End System 1	ATN End System 2
ATS Message Server	ATS Message Server
ATS Message Server	AFTN/AMHS Gateway
ATS Message Server	CIDIN/AMHS Gateway
ATS Message Server	ATS Message User Agent
AFTN/AMHS Gateway	AFTN/AMHS Gateway
CIDIN/AMHS Gateway	CIDIN/AMHS Gateway
CIDIN/AMHS Gateway	AFTN/AMHS Gateway

(*d) flight planning;*

(*e) airspace management; and*

(*f) air traffic flow management.*

Note 2. — The first of the applications developed for the ICC set is the ATS interfacility data communication (AIDC).

Note 3. — The AIDC application exchanges information between ATS units (ATSUs) for support of critical air traffic control (ATC) functions, such as notification of flights approaching a flight information region (FIR) boundary, coordination of boundary conditions and transfer of control and communications authority.

Note 4. — The detailed specification of the AIDC application is included in the Manual of Technical Provisions
for the Aeronautical Telecommunication Network (ATN) *(Doc 9705), Sub-volume III.*

Note 5. — The AIDC application is strictly an ATC application for exchanging tactical control information between ATS units. It does not support the exchange of information with other offices or facilities.

Note 6. — The AIDC application supports the following operational services:

(*a) flight notification;*
(*b) flight coordination;*
(*c) transfer of executive control;*
(*d) transfer of communications; and*
(*e) transfer of general information (flight-related data or free text messages, i.e. unstructured).*

SCHEDULE 5

CATEGORIES OF MESSAGES IN AERONAUTICAL MOBILE SERVICE — VOICE COMMUNICATIONS

Table 1.1: Categories of Messages

	Message Category and order of priority	Radio telephony signal
(a)	Distress call, distress messages and distress traffic	MAYDAY
(b)	Urgency messages, including messages preceded by the medical transports signals	PAN, PAN or PAN, PAN MEDICAL
(c)	Communications relating to direction finding	-
(d)	Flight safety messages	-
(e)	Meteorological messages	-
(f)	Flight regulatory messages	-

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Minister of Works and Transport.