

SARPS about Emergency frequency

12 May 2015

Annex 6

- 3.1.5 If an **emergency situation** which endangers the safety of the aeroplane or persons becomes known first to the flight operations officer/flight dispatcher, action by that person in accordance with 4.6.2 shall include, where necessary, **notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required.**

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- 7.1 Communication equipment
- 7.1.1 An aeroplane shall be provided with radio communication equipment capable of:
 - a) conducting two-way communication for aerodrome control purposes;
 - b) receiving meteorological information at any time during flight; and
 - c) conducting two-way communication at any time during flight with at least one aeronautical station and with such other
- aeronautical stations and on such frequencies as may be prescribed by the appropriate authority.
- Note.— The requirements of 7.1.1 are considered fulfilled if the ability to conduct the communications specified therein is established during radio propagation conditions which are normal for the route.
- 7.1.2 **The radio communication equipment required in accordance with 7.1.1 shall provide for communications on the aeronautical emergency frequency 121.5 MHz.**

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- **2.23 Service to aircraft in the event of an emergency**
- 2.23.1 An aircraft known or believed to be in a state of **emergency**, including being subjected to unlawful interference, shall be given **maximum consideration, assistance and priority** over other aircraft as may be necessitated by the circumstances.

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- 2.24.2 Interception of civil aircraft
- 2.24.2.1 As soon as an air traffic services unit learns that an aircraft is being intercepted in its area of responsibility, it shall take such of the following steps as are appropriate in the circumstances:
 - a) attempt to establish two-way communication with the intercepted aircraft via any means available, including the **emergency radio frequency 121.5 MHz**, unless such communication already exists;
 - [...]
 - c) establish contact with the intercept control unit **maintaining two-way communication** with the intercepting aircraft and provide it with available information concerning the aircraft;

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- **5.3 Use of communication facilities**
- Air traffic services units shall, as necessary, use all available communication facilities to endeavour to establish and

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- 6.1 Aeronautical mobile service
- (air-ground communications)
- 6.1.1 General
- 6.1.1.1 **Radiotelephony** and/or data link shall be used in air-ground communications for air traffic services purposes.
- **Note.— Requirements for ATS units to be provided with and to maintain guard on the emergency channel 121.5 MHz are specified in Annex 10, Volumes II and V.**

Annex 10, Vol II

- **3.5 Record of communications**
- 3.5.1 General
- 3.5.1.1 A telecommunication **log**, written or automatic, shall be **maintained in each station of the aeronautical telecommunication service** except that an aircraft station, when using radiotelephony in direct communication with an aeronautical station, need not maintain a telecommunication log.
- *Note.— The telecommunication log will serve as a protection, should the operator's watch activities be investigated. It may be required as legal evidence.*
- 3.5.1.1.1 **Recommendation.**— *Aeronautical stations should record messages at the time of their receipt, except that, if during an emergency the continued manual recording would result in delays in communication, the recording of messages may be temporarily interrupted and completed at the earliest opportunity.*
- *Note.— In the case of radiotelephony operation it would be desirable if voice recording were provided for use during interruption in manual recording.*
- 3.5.1.1.2 **Recommendation.**— *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 should be associated with information concerning the time and the position, and altitude of the aircraft.*

Annex 10, Vol II

- 5.2.2.1.1.1 Aircraft on long over-water flights, or on flights over designated areas over which the carriage of an emergency locator transmitter (ELT) is required, shall
- continuously guard the VHF emergency frequency 121.5 MHz, except for those periods when aircraft are carrying out communications on other VHF channels or when airborne equipment limitations or cockpit duties do not permit simultaneous guarding of two channels.
- 5.2.2.1.1.2 Aircraft shall continuously guard the VHF emergency frequency 121.5 MHz in areas or over routes where the possibility of interception of aircraft or other hazardous situations exist, and a requirement has been established by the appropriate authority.
- 5.2.2.1.3 Aeronautical stations shall maintain a continuous listening watch on VHF emergency channel 121.5 MHz during the hours of service of the units at which it is installed.

Annex 10, Vol V

b) 121.500	Emergency frequency	See 4.1.3.1. In order to provide a guard band for the protection of the aeronautical emergency frequency, the nearest assignable frequencies on either side of 121.500 MHz are 121.450 MHz and 121.550 MHz
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Annex 10, Vol V

- 4.1.3.1 *Emergency channel*
- 4.1.3.1.1 The emergency channel (121.5 MHz) shall be
- used only for genuine emergency purposes, as broadly outlined in the following:
- a) to provide a clear channel between aircraft in distress or emergency and a ground station when the normal channels are being utilized for other aircraft;
- b) to provide a VHF communication channel between aircraft and aerodromes, not normally used by international air services, in case of an emergency condition arising;
- c) to provide a common VHF communication channel between aircraft, either civil or military, and between
- such aircraft, and surface services, involved in common search and rescue operations, prior to changing when
- necessary to the appropriate frequency;
- d) to provide air-ground communication with aircraft when airborne equipment failure prevents the use of the
- regular channels;
- e) to provide a channel for the operation of emergency locator transmitters (ELTs), and for communication
- between survival craft and aircraft engaged in search and rescue operations;
- f) to provide a common VHF channel for communication between civil aircraft and intercepting aircraft or
- intercept control units and between civil or intercepting aircraft and air traffic services units
- *Note 1. — The use of the frequency 121.5 MHz for the purpose outlined in c) is to be avoided if it interferes in any*
- *way with the efficient handling of distress traffic.*
- *Note 2. — The current Radio Regulations make provisions that the aeronautical emergency frequency 121.5 MHz*
- *may also be used by mobile stations of the maritime mobile service, using A3E emission to communicate on this*
- *frequency for safety purposes with stations of the aeronautical mobile service (RR S5.200 and Appendix S13, Part*
- *A2).*

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- 4.1.3.1.3 The frequency 121.5 MHz shall be available to intercept control units where considered necessary for the purpose specified in 4.1.3.1.1 f).
- 4.1.3.1.4 The emergency channel shall be guarded continuously during the hours of service of the units at which it is installed.
- 4.1.3.1.5 The emergency channel shall be guarded on a single channel simplex operation basis.
- 4.1.3.1.6 The emergency channel (121.5 MHz) shall be available only with the characteristics as contained in Annex 10, Volume III, Part II, Chapter 2.

Implementation

- The aeronautical the frequency 121.500 MHz shall be provided at:
- All area control centres and flight information centres;
- Aerodrome control towers and approach control offices serving international aerodromes and international alternate aerodromes; and
- At any additional location designated by the appropriate ATS authority, where the provision of that frequency is considered necessary to ensure immediate reception of distress call or to serve the purposes specified in 4.1.3.1.1
- The implementation of the aeronautical emergency does, from the technical perspective, not require any international coordination.
- for frequency assignment planning, there is no need to introduce in the ICAO COM list 3 stations to which the frequency 121.500 MHz has been assigned and no technical analysis is required on the compatibility of this frequency.

- Thank you