

PROVISION AND SUPPORT OF EMERGENCY FREQUENCY 121.500MHz FOR THE PURPOSES OF SUPPLYING AN EMERGENCY AID AND POSITION FIXING SERVICE

1 Scope and Definition

- 1.1 The frequency 121.500MHz is recognised as an emergency frequency for aviation and as such, its use and provision is legislated in Annex 10 - Aeronautical Telecommunications to the ICAO Convention on International Civil Aviation. Volume 5, Chapter 4 to Annex 10 sets out the detailed conditions for the use of the Emergency Channel 121.500MHz. In sum, this stipulates a number of situations in which the frequency is to be used, these include: the direct handling of an emergency situation, the provision of air-ground communications in the event of an airborne equipment failure, to support search and rescue operations, or air policing/interception action. Fundamental to all these situations is the requirement to provide a clear frequency, specifically for the task, in order to minimize confusion and enhance operational efficiency. The UK conforms to the ICAO Convention on the use of the emergency channel, with the exception of two filed differences¹. The first concerns routine monitoring of the frequency and the second is to allow pilots in UK airspace to conduct practice emergency calls on 121.500MHz.
- 1.2 In order to preserve the integrity of 121.500MHz, ICAO requires the frequency to be provided and constantly guarded in all area control and flight information centres, aerodrome control towers and approach control offices serving international aerodromes and international alternate aerodromes, and any additional locations designated by the appropriate Air Traffic Service (ATS) authority.² In support of this requirement the UK has determined that it is essential for 121.500MHz to be continuously monitored at Area Control Centres (ACC) and at international aerodromes where D&D is unable to monitor to circuit altitude. The frequency is available at military aerodromes across the UK and at civil international aerodromes listed in the AIP at GEN 1.2 Appendix C.
- 1.3 As the sole civil en-route ATS provider, NERL (NATS) is contracted³ to provide and maintain the VHF emergency frequency. Under a derogation of NATS license, control of the emergency frequency is ceded to the MoD; details of the ceding arrangement are found in the Memorandum of Understanding between the CAA and MoD. The capability is currently delivered by the MoD through the Distress and Diversion (D&D) operation where military controllers constantly monitor the frequency 121.500MHz. The primary role of D&D is to provide pilots with an emergency assistance and, where possible, a position fixing service.
- 1.4 D&D can provide an almost instantaneous auto-triangulation fixing service to aircraft transmitting on 121.500MHz in the London and Scottish FIRs that are:
- 1.4.1 In the London FIR at and above 2000ft amsl east of Longitude 002 30°W and south of latitude 52°N;
- 1.4.2 In the Scottish FIR at and above 5000ft amsl except in an area in central Scotland bounded by 56 15°N 002 45°W, 56°N 003°W, 56 30°N 005 30°W and 57 15°N 004 30°W.

Aircraft transmitting on 121.500MHz outside of the auto-triangulation coverage may still be assisted by the use of surveillance equipment, in conjunction with any relevant information

¹ ICAO Annex 10 Vol II § 5.2.2.1.3 and ICAO Annex 10 Vol V § 4.1.3.1.1.

² The provision of 121.500MHz and acceptable means of compliance are detailed in CAP670 Part C Section 1 COM 02.

³ Under schedule 4 'Specified Services' of the NATS Licence.

derived from the auto-triangulation system.

- 1.5 Should an ATS Unit closer to an emergency event be better placed to handle the situation, D&D may elect to delegate Operational Control to that unit. In such circumstances D&D would retain Executive Control.
- 1.6 NATS acknowledges the fundamental contribution that the 121.500MHz emergency aid and position fixing service makes to flight safety. Furthermore, it is recognised within the UK aviation community that this system contributes to the ICAO member States' commitment regarding Strayed and Unknown aircraft. The system assists pilots who have become lost or unsure of their position, and can also help reduce the number of unintentional infringements of controlled airspace.

2. Policy

- 2.1 The CAA considers that it is essential to maintain the capability, adequately guarded and supported, to provide an emergency aid and position fixing service to pilots who are lost or in distress. It is considered that this capability provides a significant flight safety benefit to all pilots, and helps minimize the number of inadvertent infringements of controlled airspace.
- 2.2 Apart from the filed differences - which are to remain in place - the CAA wishes to conform to the stipulations of the ICAO Convention in respect of the emergency Channel 121.500MHz.
- 2.3 In operating the Emergency Channel system, the following conditions should be applied:
 - 2.3.1 D&D retains Executive Control of the emergency frequency 121.500MHz at all times.
 - 2.3.2 Operational Control may be ceded by D&D to another ATS provider for the provision of control and procedural instructions to the aircraft in emergency. D&D is to be advised as soon as the emergency is terminated.
 - 2.3.3 There should be no transmissions on the frequency 121.500MHz by ATS units without the authority of D&D. The only exceptions to this are when:
 - 2.3.3.1 A pilot in distress calls a specific ATS unit that is local to him.
 - 2.3.3.2 It is apparent that D&D is not responding to an emergency transmission.
 - 2.3.4 All usage of 121.500MHz without prior D&D approval should be reported to D&D as soon as possible.

3 DAP Point of Contact:

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