



2019 World Radiocommunication Conference Agenda Item 9.2

Difficulties or Inconsistencies Encountered in the Application of the Radio Regulations

ICAO Regional Preparatory Group meeting
21 – 22 February 2022

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WRC-19 Agenda Item 9.2

- This agenda sub-item is strictly limited to the Report of the Director on any difficulties or inconsistencies encountered in the application of the Radio Regulations and the comments from administrations.
- with Administrations being invited to inform the Director of the Radiocommunication Bureau of any difficulties or inconsistencies encountered in the Radio Regulations.



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Why is Aviation Involved?

Resolution 427 (WRC-19)

Updating Provisions Related to Aeronautical Services in the Radio Regulations

Resolves to invite the ITU Radiocommunication Sector

to study the Articles, limited to Chapters IV, V, VI and VIII of Volume I, of the Radio Regulations and their associated Appendices, as appropriate, in order to identify outdated aeronautical provisions with respect to ICAO standards and recommended practices and to develop examples of regulatory texts for updating these provisions, while ensuring that potential changes to such provisions will not impact any other systems or services operating in accordance with the Radio Regulations,



ARTICLE 18

Licences

18.1

18.2

18.3

18.4 § 2 The holder of a licence is required to preserve the secrecy of telecommunications, as provided in the relevant provisions of the Constitution and the Convention. Moreover, the licence shall mention, specifically or by reference, that if the station includes a receiver, the interception of radiocommunication correspondence, other than that which the station is authorized to receive, is forbidden, and that in cases where such correspondence is involuntarily received, it shall not be reproduced, nor communicated to third parties, nor used for any purpose, and even its existence shall not be disclosed.

What are the implications on the holder of a licence for VHF comms listened to by plane spotters etc, ADS-B Re-broadcast on numerous websites,



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ARTICLE 28

Radiodetermination Services

Section IV – Radiobeacon stations

28.18 § 11 When an administration thinks it desirable in the interests of navigation to organize a service of radiobeacon stations, it may use for this purpose:

28.19 a)

28.20 b) **fixed stations**, coast stations or aeronautical stations designated to function as radiobeacons, **at the request of mobile stations.**

Do we want fixed stations involved?

Does this mean you need a comms frequency for every radiobeacon?



ARTICLE 32

Operational procedures for distress communications in the global maritime distress and safety system (GMDSS)

Section III – Distress traffic

32.60 C – Locating and homing signals

32.61 § 36 1) Locating signals are radio transmissions intended to facilitate the finding of a mobile unit in distress or the location of survivors. These signals include those transmitted by searching units, and those transmitted by the mobile unit in distress, by survival craft, by float-free EPIRBs, by satellite EPIRBs and by search and rescue radar transponders to assist the searching units.

32.62 2) Homing signals are those locating signals which are transmitted by mobile units in distress, or by survival craft, for the purpose of providing searching units with a signal that can be used to determine the bearing to the transmitting stations.

32.63 3) Locating signals may be transmitted in the following frequency bands:

117.975-137 MHz;
156-174 MHz;
406-406.1 MHz; and
9 200-9 500 MHz.

Does aviation want
maritime signals across
these frequency bands



ARTICLE 36

Authority of the person responsible for the station

36.1 § 1 The service of a mobile station is placed under the supreme authority of the person responsible for the aircraft or other vehicle carrying the mobile station.

36.2 § 2 The person holding this authority shall require that each operator comply with these Regulations and that the mobile station for which the operator is responsible is used, at all times, in accordance with these Regulations.

36.3 § 3 Except as otherwise provided for in these Regulations, the person responsible, as well as all the persons who may have knowledge of any information whatever obtained by means of the radiocommunication service, are placed under the obligation of observing and ensuring the secrecy of correspondence

36.4 § 4 The provisions of Nos. 36.1, 36.2 and 36.3 shall also apply to personnel of aircraft earth stations

How does this Apply to UAVs/Drones?

How does this Apply to VHF Comms, ADS-B etc?



Comparison of RR Appendix 12 & ICAO Annex 10 Limits

Minimum Field Strength Required at the Boundary of the Rated Coverage for Radio Beacons by Day for 15 dB S/N

Latitude	ITU		ICAO
	Regions 1 & 2	Region 3	
<5° N&S	120μV/m	120μV/m	320μV/m
5°-15° N&S	120μV/m	120μV/m	85μV/m
15°-25° N&S	120μV/m	120μV/m	40μV/m
25°-30° N&S	120μV/m	120μV/m	18*μV/m
30°-35° N&S	70μV/m	120μV/m	18*μV/m
35°-40° N&S	70μV/m	120μV/m	18*μV/m
>40° N&S	70μV/m	70μV/m	18*μV/m

A star shown against a figure indicates that a higher value of field strength — probably 2 or 3 times the values shown (plus 6 to plus 10 dB) — may be necessary in the presence of high aircraft noise and/or industrial noise



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