

RECOMMENDATION 629*

**USE FOR THE RADIONAVIGATION SERVICE OF THE FREQUENCY
BANDS 2900-3100 MHz, 5470-5650 MHz, 9200-9300 MHz,
9300-9500 MHz AND 9500-9800 MHz**

(Question 63/8)

(1986)

The CCIR,

CONSIDERING

- (a) Resolution No. 600 of the World Administrative Radio Conference (Geneva, 1979);
- (b) that compatibility between shipborne radars and radar beacons (racons) in the radionavigation service is essential to assure safety of marine navigation;
- (c) that to be compatible, racons must operate in the frequency bands used by shipborne radars;
- (d) that most navigational shipborne radars operate in the bands 9320-9500 and 2920-3100 MHz. Only a small number of these types of radars operate in the band 5470-5650 MHz, and fewer still, if any, in the band 9500-9800 MHz;
- (e) that many airborne navigational radars operate in the 9320-9500 MHz band;
- (f) that racons presently operate in the bands 9300-9500 MHz, and in certain cases, 2900-3100 MHz;
- (g) that aeronautical radar beacons operate in the 9300-9320 MHz band;
- (h) that certain radar transponders devices operating in the bands used by these radars can be confused with a racon, thus creating the possibility of a hazard to navigation;
- (j) that other radar transponders could in certain circumstances aid in safety of navigation;
- (k) that radar transponders using user selectable techniques would not be displayed on normal shipborne radars, and thus should not be confused with a racon;
- (l) that radar transponders used for search and rescue purposes have a unique identification code which should prevent their being confused with a racon;
- (m) that the Radio Regulations restrict navigational shipborne radars from operating in the bands 2900-2920 and 9300-9320 MHz in order to protect fixed frequency racons in the maritime radionavigation service;
- (n) that the Radio Regulations restrict shipborne transponders from using the bands 2900-2930 MHz, 2950-3100 MHz, 5480-5650 MHz and 9200-9280 MHz;
- (o) that because of radar antenna squint angle, fixed frequency racons or transponders will not come into general use in the maritime radionavigation service,

UNANIMOUSLY RECOMMENDS

1. that designers of shipborne radars in the maritime radionavigation service ensure, to the extent practicable, compatibility with racons used by administrations for safety of navigation purposes;
2. that shipborne conventional pulse radars in the maritime radionavigation service preferably should not operate in the band 9500-9800 MHz;

* The Director, CCIR, is requested to bring this Recommendation to the attention of the International Maritime Organization (IMO), the International Civil Aviation Organization (ICAO) and the International Association of Lighthouse Authorities (IALA).

3. that it is desirable not to exclude shipborne radars in the maritime radionavigation service from using the band 2900-2920 MHz;
 4. that the effects of the maritime use by shipborne radars of the 9300-9320 MHz band on the aeronautical radionavigational service be urgently studied;
 5. that special care be taken to prevent the response from transponders which operate in the bands 2900-3100 MHz, 9200-9300 MHz and 9300-9500 MHz from causing harmful interference to shipborne and airborne radars or from being confused with the response from radar beacons;
 6. that administrations reconsider the existing restrictions on the use of shipborne transponders in the band 2900-2930 MHz, 2950-3100 MHz, 5480-5650 MHz and 9200-9280 MHz to determine if there are technical or operational reasons for these restrictions to be continued.
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