



The International Amateur Radio Union

IARU

The Need for a Secondary Amateur Allocation at 5 MHz

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The IARU

- Founded in Paris 1925
- International NGO - headquartered in Newington, Connecticut, USA
- Represents the interests of national member societies at the ITU and with RTOs
- Sector member of ITU-R and ITU-D
- Recognized by ECOSOC
- Three Regional bodies for ITU Regions 1, 2 and 3
- Represents the interests of two way amateur radio communication
- Three international officers:
 - Tim Ellam (CAN)
 - Ole Garpestad (NOR)
 - Rod Stafford (USA)
- Represented at ITU and RTOs by the officers and other volunteers



Agenda Item 1.4

to consider a possible new allocation to the amateur service on a secondary basis within the band 5 250 – 5 450 kHz

Resolution 649 [COM6/12] (WRC-12)

Invites WRC-15 to consider

- the possibility of making an allocation of an ***appropriate amount*** of spectrum, not necessarily contiguous, to the amateur service on a secondary basis within the band **5 250-5 450 kHz**,

Based on

- study of ***spectrum requirements*** for a secondary allocation to the amateur service within the band 5 250-5 450 kHz;
- And ***sharing studies*** on the impact to other services currently allocated in the band and in the adjacent bands;



Why Agenda Item 1.4 and 5 MHz

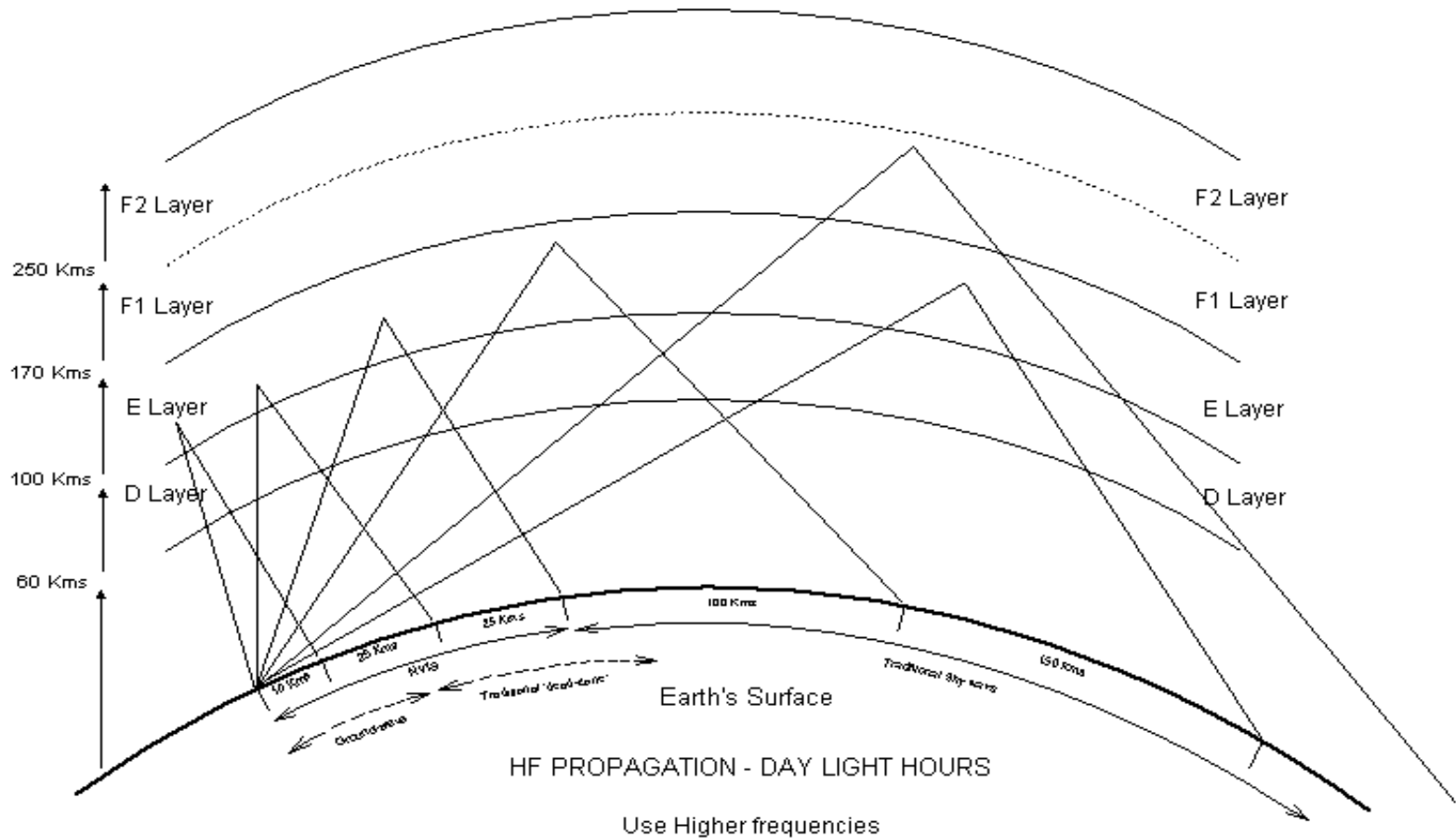
Considering:

- allocations to the amateur service in the HF bands allows radio amateurs to play an important role in delivery of communications in support of relief operations
- radio communication in the HF bands is dependent on propagation factors
- the need for an operating frequency close to the maximum usable frequency (MUF) for varying distances and time of day
- current amateur radio allocations exist at 3 500 kHz and 7 000 kHz

An allocation at 5 MHz will bridge the propagation gap between the 3 500 kHz and the 7 000 kHz amateur radio bands and enable the amateur service to maintain stable communication over various distances for the whole 24 hours, especially for use when providing communications in disaster situations and during relief operations.



HF Propagation





Current amateur use near 5 MHz

A number of administrations have allowed various use of frequencies in this band under RR 4.4 in order to

- *allow for propagation studies*
- *allow for communication during emergencies and natural disasters*
- *verify sharing/show lack of interference with incumbent services*



Current amateur use near 5 MHz

Worldwide 5 MHz Amateur Allocations from 5250 - 5450 kHz

Country	5250	5260	5270	5280	5290	5300	5310	5320	5330	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430	5440	5450
Australia	5102.0										5355.0										
Bahrain													5371.5			5403.5					
Bangladesh	5250						5310														
Cayman Islands									5330.5	5346.5		5366.5	5371.5			5403.5					
Croatia		5260															5410				
Czech Republic		5260																			
Denmark & Faroes	5250																				5450
Dominican Republic	5258.5		5278.5	5288.5								5366.5	5371.5		5398.5	5403.5					
Finland				5288.6	5298.6				5330.6	5346.6		5366.6	5371.6		5398.6						
Greece															5398.5						
Greenland	5258.5		5278.5	5288.5								5366.5	5371.5		5398.5	5403.5					
Grenada	5250																				5450
Iceland		5260															5410				
New Zealand								5320									5395				
Norway		5260															5410				
Portugal				5288.5									5371.5			5403.5					
Republic of Ireland			5278.5	5288.5											5398.5	5403.5					
Slovakia	5258.5																				5410
Somalia	5060																				5450
St. Lucia									5330.5	5346.5		5366.5	5371.5			5403.5					
Trinidad & Tobago	5250																				5450
United Kingdom	5258.5		5278.5	5288.5								5366.5	5371.5		5398.5	5403.5					
US & Dependencies	5167.5								5330.5	5346.5	5357.0	5366.5	5371.5			5403.5					

COLOUR CODE
 Emergency Use only : Aus - WICEN, Non-Amateur Calls, Commercial Equip.; NZ - Special AREC Calls ; US - Alaska Only - General Usage in Emergency
 Normal Usage Light GREEN Print - Out of Chart Frequency End of Current Phase 31/12/2011
 Listen Only Greece - RAAG HQ Station Only Replacement Frequency when New FCC R & O Becomes Operational



Other AIs of interest to the amateurs

AI 1.1 additional spectrum allocation to the mobile service and additional frequency bands for International Mobile Telecommunications (IMT) to facilitate development of terrestrial mobile broadband applications

AI 1.10 possible additional spectrum allocations for mobile-satellite service within 22 – 26 GHz.

RR:

24-24.05	AMATEUR AMATEUR-SATELLITE 5.150
24.05-24.25	RADIOLOCATION Amateur Earth exploration-satellite (active) 5.150



Other Als of interest to the amateurs

Al 1.18 primary allocation to the radiolocation service for automotive applications in the 77,5 – 78 GHz band.

RR:

76-77.5	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149
77.5-78	AMATEUR AMATEUR-SATELLITE Radio astronomy Space research (space-to-Earth) 5.149
78-79	RADIOLOCATION Amateur Amateur-satellite Radio astronomy Space research (space-to-Earth) 5.149 5.560
79-81	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149



Other Als of interest to the amateurs

AI 1.6.1: possible additional primary allocations to the fixed-satellite service of 250 MHz in the range between 10 GHz and 17 GHz in Region 1.

AI 1.12 a 600 MHz extension of the current worldwide allocation to Earth exploration-satellite service within 8 700-9 300 and/or 9 900 – 10 500 MHz.

RR:

Allocation to services		
Region 1	Region 2	Region 3
10-10.45 FIXED MOBILE RADIOLOCATION Amateur 5.479	10-10.45 RADIOLOCATION Amateur 5.479 5.480	10-10.45 FIXED MOBILE RADIOLOCATION Amateur 5.479
10.45-10.5	RADIOLOCATION Amateur Amateur-satellite 5.481	