

**UNITED STATES OF AMERICA**  
**DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE**

**(Editor's Note: The WRC-12 Advisory Committee approved a proposal for Agenda Item 1.23 at its September 1, 2009, meeting (Document WAC/053). The NTIA has not concurred with the WAC proposal adopted on September 1, 2009. This proposal is offered as an option for consideration during the reconciliation process and submitted to the WAC for consideration because of the different frequency range suggested. This proposal does NOT alter the position of the WAC adopted in Document WAC/053, but merely documents an acceptable method of reconciliation.)**

**Agenda Item 1.23:** to consider an allocation of about 15 kHz in parts of the band 415-526.5 kHz to the amateur service on a secondary basis, taking into account the need to protect existing services

**Background Information:** The spectrum between 415-526.5 kHz is currently allocated to the maritime mobile and aeronautical radiolocation services, with some variances in the allocations among the three ITU Regions. Footnote No. **5.82** advises, in relevant part, "In using the band 415-495 kHz for the aeronautical radiolocation service, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz." Footnote No. **5.82B** advises, "Administrations authorizing the use of frequencies in the band 495-505 kHz by services other than the maritime mobile service shall ensure that no harmful interference is caused to the maritime mobile service in this band or to the services having allocations in adjacent bands, noting in particular the conditions of the use of the frequencies 490 and 518 kHz, as prescribed in Articles **31** and **52**." NAVTEX services operate on 490 kHz and 518 kHz per Resolution **339 (Rev. WRC-07)**.

Maritime mobile operations within this band are and have been historically limited to radiotelegraphy, per Footnotes No. **5.79** and **5.82**. Over the past two decades, maritime mobile operations within the range 415-526.5 kHz have significantly diminished with the implementation of the Global Maritime Distress Safety System. The designation of the 495-505 kHz portion of this band for distress and calling purposes was suppressed at WRC-07.

Aeronautical radiolocation applications within 415-526.5 kHz are limited to non-directional beacons not employing voice transmission. This limitation is required by Footnote No. **5.80** within ITU Region 2 and is reflected in actual practice elsewhere in the world. Analysis of operating NDBs indicates relatively low population within the range 472-487 kHz.

A secondary allocation between 415-526.5 kHz would offer an option for amateurs complementing the existing LF and MF international allocations at 135.7-137.8 kHz and 1810-1850 kHz (1800-2000 kHz in Regions 2 and 3). Amateurs select operating frequencies based on the communication and path desired, and the range 15-526.5 kHz offers groundwave propagation characteristics that may prove ideal for a given path.'

Worldwide, the amateur service successfully shares spectrum as a secondary user to the fixed service between 10.100 and 10.150 MHz. In some countries around the world, including the

United States, amateurs utilize specific channels between 5.25 and 5.45 MHz as secondary users to the fixed and mobile services. The primary interference avoidance technique on these bands has been a listen-before-transmit protocol, supplemented by appropriate regulatory power limitations. These techniques have led to successful sharing arrangements, which should be replicable within the range 415-526.5 kHz.

**Proposal:**

ARTICLE 5

**Section IV – Table of Frequency Allocations**  
(See No. 2.1)

**MOD** USA/AI 1.23/1

**200-495 kHz**

Allocation to services		
Region 1	Region 2	Region 3
<b>415-435</b> MARITIME MOBILE 5.79  AERONAUTICAL RADIONAVIGATION 5.72	<b>415-<del>472</del></b> MARITIME MOBILE 5.79 <del>5.79A</del> Aeronautical radionavigation 5.80	
<b>435-<del>472</del></b> MARITIME MOBILE 5.79 <del>5.79A</del> Aeronautical radionavigation 5.72 5.82	5.77 5.78 5.82	
<b>472-487</b> MARITIME MOBILE 5.79 <del>5.79A</del> Aeronautical radionavigation  <u>Amateur</u> 5.72 5.82	<b>472-487</b> MARITIME MOBILE 5.79 <del>5.79A</del> Aeronautical radionavigation 5.80  <u>Amateur</u> 5.77 <del>5.78</del> 5.82	
<b>487-495</b> MARITIME MOBILE 5.79 5.79A  Aeronautical radionavigation 5.72 5.82	<b>487-495</b> MARITIME MOBILE 5.79 5.79A Aeronautical radionavigation 5.80  5.77 <del>5.78</del> 5.82	

**Reason:** A secondary allocation to the amateur service will complement the frequencies available for amateur use. The segment 472-487 kHz affords 3 kHz separation to NAVTEX operation and avoids conflict with the vast majority of aeronautical NDBs. Amateurs may share segments of the spectrum between 472 and 487 kHz utilizing a listen before transmit protocol. Footnotes 5.78 and 5.79A are removed where appropriate but retained in the ranges and ITU Regions to which they apply.

**MOD** USA/AI 1.23/2

5.82 In the maritime mobile service, the frequency 490 kHz is to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrowband direct-printing telegraphy. The conditions for use of the frequency 490 kHz are prescribed in Articles **31** and **52**. In using the band 415-495 kHz for the aeronautical radionavigation or amateur services, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz.

**Reason:** This change affords NAVTEX the same protection from the amateur service as is given by the aeronautical radiolocation service.

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