

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

**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. 5.82A advises, "The use of the band 495-505 kHz is limited to radiotelegraphy." 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 the adjacent bands, noting in particular the conditions of use of the frequencies 490 kHz 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). There is a common primary mobile service allocation across all three Regions in the band 495-505 kHz. In Region 2, the primary mobile service allocation extends to 510 kHz.

The band 495-505 kHz was previously designated for mobile service distress and calling. The frequency of 500 kHz was designated as an international calling and distress frequency. Over the past two decades, safety and security operations near 500 kHz have been replaced through the operation of the Global Maritime Distress Safety System. As a result, designation of 500 kHz as an international distress and calling frequency was suppressed at WRC-2000, and the broader designation of 495-505 kHz as a distress and calling band was suppressed at WRC-07.

Maritime ship-to-ship and ship-to-shore telegraphy near 500 kHz has diminished, but is still utilized on occasion by maritime mobile licensees and, in the United States, Coast Guard Auxiliary operators.

The principal interest of the amateur radio service in this band lies in its unique propagation properties, which are different from those in the 135 kHz and 1800 kHz bands. For example, the band allows for propagation unaffected by ionospheric disturbances and sunspot cycle variations. This characteristic would prove invaluable in the continuing development by radio amateurs of dependable emergency communications.

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 at or near 500 kHz.

**Proposal:**

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Deleted: The band 495-505 kHz provides international harmonization and necessary maritime propagation characteristics for global harmonization of maritime services.¶

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ARTICLE 5

Frequency allocations

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

**ADD** USA/AI1.23/1

495-1 800 kHz

Allocation to services		
Region 1	Region 2	Region 3
495-505		
MOBILE 5.82A <u>MOD 5.82B</u> <u>Amateur MOD 5.82B</u>		
<del>505-510</del>	<del>505-510</del>	<del>505-510</del>
MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION <u>Amateur ADD 5.82C</u>	MARITIME MOBILE 5.79 <u>Amateur ADD 5.82C</u>	MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION Aeronautical Mobile Land Mobile <u>Amateur ADD 5.82C</u>
5.72		
<del>510-526.5</del>	<del>510-525</del>	<del>510-526.5</del>
<u>MARITIME MOBILE 5.79 5.79A</u> <u>5.84</u> <u>AERONAUTICAL</u> <u>RADIONAVIGATION</u>	MOBILE 5.79A 5.84 AERONAUTICAL RADIONAVIGATION	<u>MARITIME MOBILE 5.79 5.79A</u> <u>5.84</u> <u>AERONAUTICAL</u> <u>RADIONAVIGATION</u> <u>Aeronautical Mobile</u> <u>Land Mobile</u>

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**MOD** USA/AI1.23/2

5.82B: Administrations authorizing the use of frequencies in the band 495-505 kHz by the amateur service or other 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 the adjacent bands, noting in particular the conditions for use of the frequencies 490 kHz and 518 kHz, as prescribed in articles 31 and 52. (WRC-07)

**ADD** USA/AI1.23/3

5.82C: Administrations authorizing the use of frequencies in the band 505-510 kHz by the amateur service shall ensure that no harmful interference is caused to the other services in this band or to the services having allocations in the adjacent bands, noting in particular the conditions for use of the frequencies 490 kHz and 518 kHz, as prescribed in articles 31 and 52.

**Reasons:** The maritime and amateur communities support the continued use 415-526.5 kHz for the existing maritime services and other existing services. Amateur radiotelegraphy may share segments of the spectrum between 495 and 510 kHz utilizing a listen before transmit protocol without interfering with existing services. At least 5 kHz separation is afforded to NAVTEX operation.

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