

# 512-608 MHz

## 1. Band Introduction

The 512-608 MHz band is allocated exclusively to non-Federal use for the broadcasting service. Any use of this band by Federal agencies is subject to coordination. Subject to the provisions in Section 7.15.3 of the NTIA Manual, the military services may employ frequencies in this band, after coordination between FCC field personnel and military field personnel, for tactical and training operations in the U.S. and Possessions in accordance with the arrangement between the FCC and the Military. The limited Federal applications of this band fall into four categories: aeronautical mobile telecommand; ship-shore-ship operations; broadcasting; and research, development, testing, and evaluation.

## 2. Allocations

### 2a. Allocation Table

The frequency allocation table shown below is extracted from the NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management, Chapter 4 – Allocations, Allotments and Plans.

*Table of Frequency Allocations*

Federal Table	Non-Federal Table	FCC Rule Part(s)
512-608	512-608 BROADCASTING  NG115 NG128 NG142 NG149	Broadcast Radio (TV)(73) LPTV, TV Translator/Booster (74G) Low Power Auxiliary (74H)

### 2b. Additional Allocation Table

**NG115** In the bands 54-72 MHz, 76-88 MHz, 174-216 MHz, 470-608 MHz, and 614-806 MHz, wireless microphones and wireless assist video devices may be authorized on a non-interference basis, subject to the terms and conditions set forth in 47 CFR part 74, subpart H.

**NG128** In the band 535-1705 kHz, AM broadcast licensees or permittees may use their AM carrier on a secondary basis to transmit signals intended for both broadcast and non-broadcast purposes. In the band 88-108 MHz, FM broadcast licensees or permittees are permitted to use subcarriers on a secondary basis to transmit signals intended for both broadcast and non-broadcast purposes. In the bands 54-72, 76-88, 174-16, 470-608 and

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614-806 MHz, TV broadcast licensees or permittees are permitted to use subcarriers on a secondary basis for both broadcast and non-broadcast purposes.

**NG142** TV broadcast stations authorized to operate in the bands 54-72 MHz, 76-88 MHz, 174-216 MHz, 470-608 MHz, and 614-806 MHz may use a portion of the television vertical blanking interval for the transmission of telecommunications signals, on the condition that harmful interference will not be caused to the reception of primary services, and that such telecommunications services must accept any interference caused by primary services operating in these bands.

**NG149** The bands 54-72 MHz, 76-88 MHz, 174-216 MHz, 470-512 MHz, 512-608 MHz, and 614-698 MHz are also allocated to the fixed service to permit subscription television operations in accordance with 47 CFR part 73.

**3. Federal Agency Use**

**3a. Federal Agency Frequency Assignments Table**

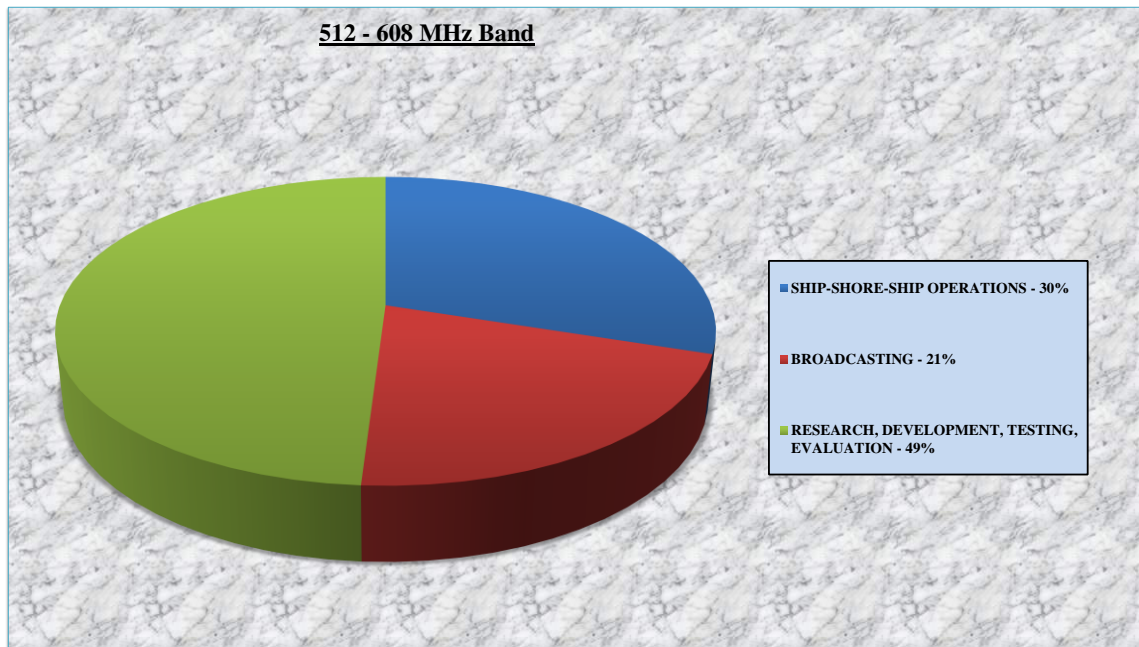
The following table identifies the frequency band, type(s) of allocation(s), types of application, and the number of frequency assignments by agency.

*Federal Frequency Assignment Table*

<b>512-608 MHz Band</b>				
<b>NON-FEDERAL EXCLUSIVE BAND</b>				
<b>BROADCASTING</b>				
<b>AGENCY</b>	<b>SHIP SHORE SHIP OPERATIONS</b>	<b>BROADCASTING</b>	<b>RESEARCH DEVELOPMENT TESTING EVALUATION</b>	<b>TOTAL</b>
<b>AF</b>			<b>9</b>	<b>9</b>
<b>AR</b>		<b>5</b>		<b>5</b>
<b>N</b>	<b>7</b>		<b>2</b>	<b>9</b>
<b>TOTAL</b>	<b>7</b>	<b>5</b>	<b>11</b>	<b>23</b>
The number of actual systems, or number of equipments, may exceed and sometimes far exceed, the number of frequency assignments in a band. Also, a frequency assignment may represent, a local, state, regional or nationwide authorization. Therefore, care must be taken in evaluating bands strictly on the basis of assignment, counts or percentages of assignments.				

### 3b. Percentage of Frequency Assignments Chart

The following chart displays the percentage of assignments for the Federal Government applications listed in the chart legend below for the frequency band 512-608 MHz.



## 4. Frequency Band Analysis By Application

The Army operates a broadcasting television transmitter in this band for the U.S. Army Kwajalein Atoll, Republic of the Marshall Islands. This use has been coordinated with the host nation in accordance with Annex L Section 3.1 of the NTIA Manual.

The Navy operates a shore transmitter facility in Fort Story, VA for shipboard direction calibration of U.S. Navy ships. The ships turn in a continuous circle while receiving signals from the shore transmitter facility using a directional antenna pointed out to sea.

The Air Force operates an aeronautical telecommand system at Holloman and White Sands Missile Range, NM.

## 5. Planned Use

The limited Federal use of this band by the Military Services is expected to remain the same.