

# 2310-2320 MHz

## 1. Introduction

The Navy and the Department of Energy operate aeronautical telemetry systems in this band. The military uses this band for point-to-point data link communications systems. Additionally, the Air Force uses this band for research, development, testing and evaluation activities.

## 2. Allocations

### 2a. Allocations Table

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

*Table of Frequency Allocations*

*United States Table*

<b>Federal Table</b>	<b>Non-Federal Table</b>	<b>FCC Rule Part(s)</b>
2310-2320 Fixed Mobile US339 Radiolocation G2  US327 US338	2310-2320 FIXED MOBILE US339 BROADCASTING-SATELLITE RADIOLOCATION  5.396 US327 US338	Wireless Communications (27) Aviation (87)

### 2b. Additional Allocations Table Information

**5.396** Space stations of the broadcasting-satellite service in the band 2310-2360 MHz operating in accordance with No. 5.393 that may affect the services to which this band is allocated in other countries shall be coordinated and notified in accordance with Resolution 33 (Rev.WRC-03). Complementary terrestrial broadcasting stations shall be subject to bilateral coordination with neighboring countries prior to their bringing into use.

**US327** The band 2310-2360 MHz is allocated to the broadcasting-satellite service (sound) and complementary terrestrial broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to the provisions of Resolution 528.

## **2310 – 2320 MHz**

**US338** The following provisions shall apply in the band 2305-2320 MHz:

(a) In the sub-band 2305-2310 MHz, space-to-Earth operations are prohibited.

(b) Within 145 km of Goldstone, CA (35° 25' 33" N, 116° 53' 23" W), Wireless Communications Service (WCS) licensees operating base stations in the band 2305-2320 MHz shall, prior to operation of those base stations, achieve a mutually satisfactory coordination agreement with the National Aeronautics and Space Administration (NASA).

NOTE: NASA operates a deep space facility in Goldstone in the band 2290- 2300 MHz.

**US339** The bands 2310-2320 and 2345-2360 MHz are also available for aeronautical telemetering and associated telecommand operations for flight testing of manned or unmanned aircraft, missiles or major components thereof on a secondary basis to the Wireless Communications Service. The following two frequencies are shared on a co-equal basis by Federal and non-Federal stations for telemetering and associated telecommand operations of expendable and re-usable launch vehicles whether or not such operations involve flight testing: 2312.5 and 2352.5 MHz. Other mobile telemetering uses may be provided on a non-interference basis to the above uses. The broadcasting-satellite service (sound) during implementation should also take cognizance of the expendable and reusable launch vehicle frequencies 2312.5 and 2352.5 MHz, to minimize the impact on this mobile service use to the extent possible.

**G2** In the bands 216.965-216.995 MHz, 420-450 MHz (except as provided for in G129), 890-902 MHz, 928-942 MHz, 1300-1390 MHz, 2310-2390 MHz, 2417-2450 MHz, 2700-2900 MHz, 3300-3500 MHz (except as provided for in US108), 5650-5925 MHz, and 9000-9200 MHz, use of the Federal radiolocation service is restricted to the military services.

### 3. Federal Agency Use

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

The following table identifies the frequency band, types of allocations, types of applications, and the number of frequency assignments by agency.

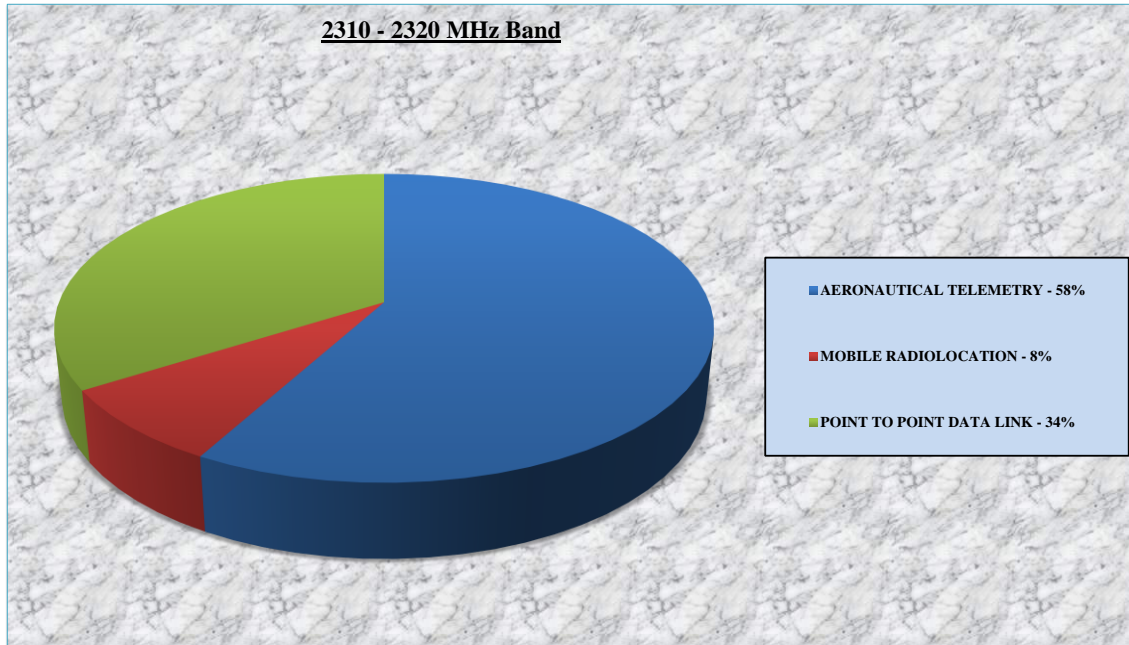
*Frequency Assignment Table*

2310-2320 MHz					
SHARED BAND					
AGENCY	FIXED MOBILE BROADCASTING-SATELLITE RADIOLOCATION				
	TYPE OF APPLICATION				
	AERONAUTICAL TELEMETRY	LAND MOBILE TELEMETRY	POINT TO POINT DATA LINK		TOTAL
	AF	8			
AR			13		13
DOE		3			3
N	14				14
<b>TOTAL</b>	<b>22</b>	<b>3</b>	<b>13</b>		<b>38</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 frequency assignments for the various types of Federal systems operating in the 2310-2320 MHz band.



## 4. Frequency Band Analysis by Application

### 4a. Aeronautical Telemetry

The Navy uses this band for air-to-ground data links to transmit telemetry data from airborne vehicles to ground stations in support of flight testing missions at Guam, and Barking Sands in Hawaii.

The military services have established Area Frequency Coordinators that are responsible for coordination of all frequency use in the fixed and mobile services, except for the radiolocation service, with the Aerospace and Flight Test Radio Coordinating Council (AFTRCC) Coordinator. NTIA and the FCC recognize AFTRCC as the Frequency Coordinating Advisory Committee for non-Federal flight test telemetry station assignments in the 2310-2320 MHz band.

The Department of Energy uses this band for reentry vehicle telemetry in support of National Missile Defense Program, Integrated Flight Test series over the Pacific Ocean. The Department of Energy also operates aeronautical mobile telemetry (AMT) systems in support of the Penetration Aid Development and Characterization (PEN AIDS) Program over the Pacific Ocean.

#### **4b. Point-to-Point Data Link**

The military has frequency assignments for fixed point-to-point links operating on a secondary basis throughout the 2310-2390 MHz band, including a limited number of assignments in the 2310-2320 MHz sub-band, to support training operations within the Mobile Subscriber Equipment (MSE) network at locations across the United States.

#### **4c. Research, Development, Testing and Evaluation**

The Air Force uses this band for research and development, operational tests, tactics and training.

#### **4d. Radiolocation**

The Navy uses this band for a shipboard radar system located at the Fleet Operational Readiness Accuracy Checksite in Hawaii, which provides measurement of a ship sensor (e.g., shipboard direction finder) to check its navigational accuracy in littoral waters along the coast of Hawaii.

### **5. Planned Use**

The Federal Government use of this band is expected to remain the same for the foreseeable future.