1525-1535 MHz

1. Band Introduction

The primary Federal use of the band 1525-1535 MHz is for earth stations in the space-to-Earth direction in conjunction with commercial mobile-satellite service (MSS) systems. The band 1525-1559 MHz is paired with the band 1626.5-1660.5 MHz which is used for Earth-to-space communications. The commercial satellite service providers include the London-based INMARSAT and the U.S.-based LightSquared. The Coast Guard and the Department of Interior operate mobile earth terminals in the band in support of maritime communications via the INMARSAT commercial satellites. In addition to these emergency communications, the Federal agencies operate mobile earth terminals, including aeronautical, land, and maritime, using commercial satellite systems.

2. Allocations

2a. Allocation Table

The frequency allocation 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

Federal Table	Non-Federal Table	FCC Rule Part(s)
1525-1535 MOBILE-SATELLITE (space-to-Earth) US315 US380 5.341 5.351		Satellite Communications (25) Maritime (80)

2b. Additional Allocation Table Information

US315 In the frequency bands 1530-1544 MHz and 1626.5-1645.5 MHz, maritime mobile-satellite distress and safety communications, *e.g.*, GMDSS, shall have priority access with real-time preemptive capability in the mobile-satellite service. Communications of mobile-satellite system stations not participating in the GMDSS shall operate on a secondary basis to distress and safety communications of stations operating in the GMDSS. Account shall be taken of the priority of safety-related communications in the mobile-satellite service.

US380 In the bands 1525-1544 MHz, 1545-1559 MHz, 1610-1645.5 MHz, 1646.5-1660.5 MHz, 2000-2020 MHz, 2180-2200 MHz, and 2483.5-2500 MHz, a non-Federal licensee in the mobile-satellite service (MSS) may also operate an ancillary terrestrial component in conjunction with its MSS network, subject to the Commission's rules for ancillary terrestrial components and subject to all applicable conditions and provisions of its MSS authorization.

S5.341 In the bands 1400-1727 MHz, 101-120 GHz and 197-220 GHz, passive research is being conducted by some countries in a program for the search for intentional emissions of extraterrestrial origin.

S5.351 The bands 1525-1544 MHz, 1545-1559 MHz, 1626.5-1645.5 MHz and 1646.5-1660.5 MHz shall not be used for feeder links of any service. In exceptional circumstances, however, an earth station at a specified fixed point in any of the mobile-satellite services may be authorized by an administration to communicate via space stations using these bands.

3. Federal Agency Use

3a. Federal Agency Frequency Assignments Table

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

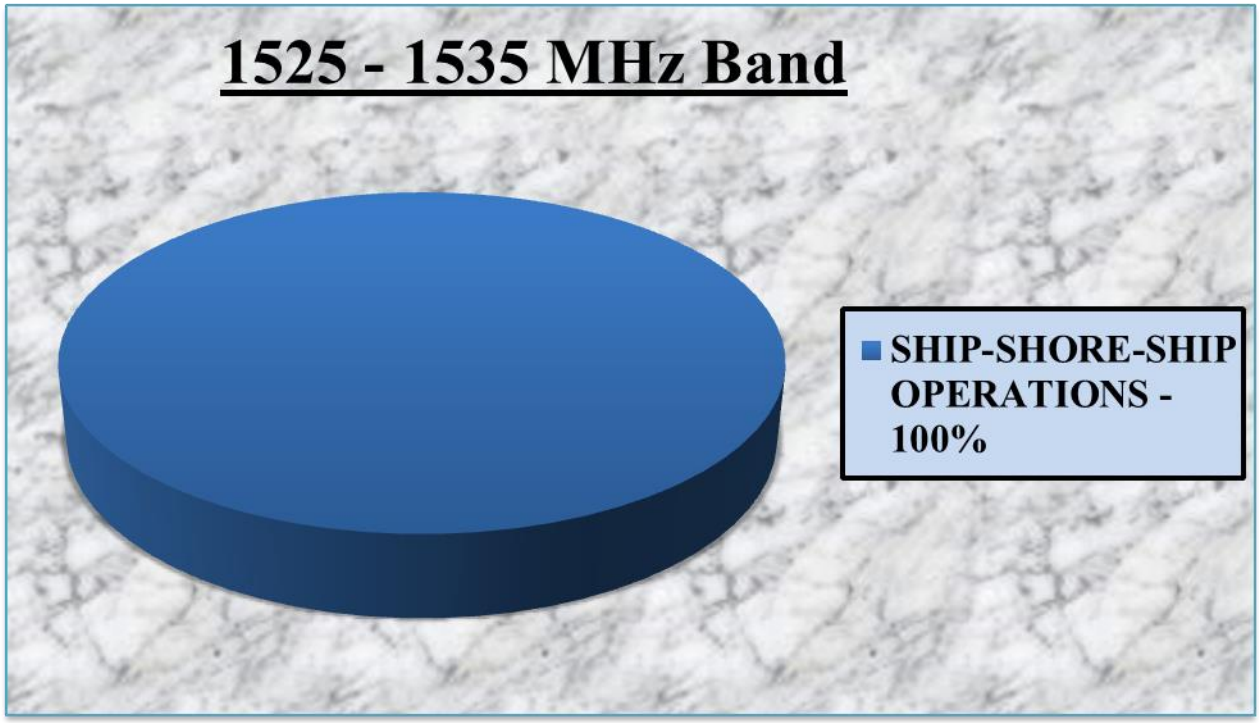
Federal Frequency Assignment Table

1525-1535 MHz Band				
SHARED BAND				
	MOBILE-SATELLITE (space-to-Earth)			
	TYPE OF APPLICATION			
AGENCY	SHIP-SHORE-SHIP OPERATIONS			TOTAL
N	1			1
TOTAL	1			1

The number of actual systems, or number of equipments, may exceed and sometimes far exceed, the number of frequency assignments in the 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 in the Government Master File for the applications operating in the frequency band 1525-1535 MHz.



4. Frequency Assignments By Application

The majority of the Federal use of commercial mobile-satellite service systems in this band is covered by FCC licenses therefore the Government Master File (GMF) is not good indicator of Federal usage.[1] These communications often support the operation of mobile earth terminals anywhere in the United States and its Possessions (US&P), as well as in international air space and waters, to include support for emergency communications. Operation of mobile terminals with satellite systems offers service to locations out of reach of terrestrial commercial services and provides critical support during disasters or other emergencies.

The Coast Guard and the Department of the Interior operate mobile earth terminals in the 1525-1544 MHz portion of this band for maritime emergency communications via the INMARSAT commercial satellites. These operations fall within the Global Maritime Distress and Safety System (GMDSS) of the International Maritime Organization (IMO) which includes carriage of

[1] *See* NTIA Manual Part 7.23, FEDERAL GOVERNMENT AGENCIES AS END USERS OF FCC LICENSED COMMERCIAL SERVICES. In this band, agencies normally do not request GMF MSS assignments for receiving earth stations.

emergency beacons onboard various types of ships and vessels.[2] GMDSS has priority access with real-time preemptive capability for communications in the mobile-satellite service.

In addition to the GMDSS and AMS(R)S operations, the Federal agencies operate mobile earth terminals in the aeronautical, land mobile, and maritime mobile-satellite services using the INMARSAT and LightSquared commercial satellite systems. These operations are normally for locations out-of-reach of terrestrial commercial services and in many cases provide critical support during disasters or other emergencies.

5. Planned Use

The Coast Guard and the Department of Interior requirements for access to the band to support GMDSS maritime emergency communications will continue for the foreseeable future.

The Federal agencies will continue to operate mobile earth terminals using commercial satellite systems to support civilian and military communication requirements, including emergencies, for the foreseeable future.

[2] IMO is the United Nations agency concerned with international maritime activities.