

**Before the
Federal Communications Commission
Washington, D.C. 20554**

DA 11-1146

Released: June 30, 2011

**PUBLIC SAFETY AND HOMELAND SECURITY BUREAU SEEKS COMMENT ON
NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL'S PETITION
FOR RULEMAKING TO ALLOW AIRCRAFT VOICE OPERATIONS ON
SECONDARY TRUNKING CHANNELS IN THE 700 MHZ BAND**

RM-11433

Response of the State of Maryland

Submitted by:

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July 12, 2011

Introduction

The State of Maryland (“State”) thanks the Federal Communications Commission (“FCC”) for issuing RM-11433 and seeking comments relative to the opening of a rule-making proceeding on the very important issue of air-to-ground 700 MHz narrowband radio channels. The State is also grateful to the National Public Safety Telecommunications Council (“NPSTC”) for submitting the Petition in response to what Maryland believes is a nationwide issue important to public safety aircraft operations and ground based first responders.

As this Public Notice is focused on the issue of initiating a rulemaking procedure, the State will limit its comments in this submission to the specific issues articulated by the FCC within the Public Notice (“PN”). Notwithstanding the specific issues identified in the PN for comment, the State notes that the NPSTC Petition for Rule Making accurately introduced the relevant issues of importance to Maryland as the State works to implement a comprehensive statewide 700 MHz network known as the Maryland First responders Interoperable Radio System Team or “Maryland FIRST”. Maryland FIRST will support first responders at all levels of government and require communications with public safety aircraft used by state and local government first responder partners.

The PN requests comments relative to the following specific issues:

1. “How and in what ways the secondary trunking channels are used today.”

The 700 MHz channels identified in 47 CFR §90.531(b)(7) are not used today in Maryland. The State has adopted P25 as the standard for 700 MHz Interoperability pursuant to the FCC’s regulations as found in 47 CFR §90.548(a)(1). A search of the FCC’s Universal Licensing System (“ULS”) database confirmed that license activity on these 700 MHz secondary

interoperability channels is extremely limited throughout the United States with one Experimental License issued to a private sector manufacturer¹ in Palm Beach County, Florida as well as a recent filing by the State of Colorado². The ULS depicts that the use of the channels is essentially fallow nationwide. Because the Commission has adopted P25 Phase I³ as the standard for 700 MHz Interoperability, there will likely be no nationwide use on these channels in the future unless the permitted uses are changed. This is why both NPSTC and Maryland believe that these channels are appropriate to be considered for the proposed use.

2. “The compatibility of the proposed airborne operation with terrestrial use.”

Maryland believes that there will be complete intrastate compatibility with first responder organizations employing the P25 standard which is required⁴ for use on the Interoperability channels in the 700 MHz band. The State’s Plan is to support 700 MHz public safety operation in every county within Maryland. As part of the Maryland FIRST project, the State plans to implement 700 MHz operations in all areas of the State⁵. With these counties having 700 MHz infrastructure, all Maryland counties, with the exception of Washington, Allegany, and Garrett counties (“WAGIN”), which are in the mountainous portion of the State, will operate in the 700 or 800 MHz frequency bands during the initial phases of the project. The WAGIN counties will migrate to 700 MHz during the

¹ See [WF2XGJ](#), ULS search conducted on July 5, 2011,

² See [0004730586](#), an application filed by the State of Colorado for operation of six of the eight frequencies reserved by the Commission for secondary trunking.

³ See 47 CFR §90.547(a).

⁴ *Id.*

⁵ In some counties, the Maryland FIRST system may be integrated as part of a local system and operate on 800 MHz frequencies through the P25 Inter RF Subsystem Interface (“ISSI”).

final phase of the Maryland FIRST project⁶. In the WAGIN counties where other frequency bands are used, the multi-band radios acquired for the State's aircraft will permit operation and on-scene coordination of first responder activities.

In addition to law enforcement and fire operations, the State's emergency medical network will migrate to 700 MHz operation as part of Maryland FIRST. Maryland has recently executed a contract for a dozen new state-of-the-art helicopters, operated by the State Police, which will require 700 MHz access. Maryland utilizes these aircraft extensively in support of emergency medical services involving trauma.

The Maryland FIRST system planners are working closely with the Maryland Institute for Emergency Medical Services Systems ("MIEMSS"), Maryland State Police ("MSP"), and the Maryland National Guard ("MNG") to incorporate plans and strategies for operations in the 700 MHz band. To comply with the FCC's directive in DA 01-406, Maryland believes that we must have access to specific 700 MHz aircraft channels that will not interfere with other states using the "state" 700 MHz channels⁷.

Maryland has also reached out to neighbors who also fly into the Baltimore "Shock Trauma" Center and other Level One trauma facilities in the State with critically injured patients. The State plans to coordinate use of the 700 MHz channels requested in this Petition with all neighboring state, local, and private operators of aircraft transporting trauma victims to medical facilities.

⁶ Implementation of the Maryland FIRST network is being conducted in phases subject to funding availability.

⁷ See 47 CFR §90.531(b)(5).

3. “What coordination procedures geographically adjacent licensees should employ to limit interference from airborne operation.”

The reason that Maryland initiated the request in this matter was the State’s desire to prevent 700 MHz interference with our neighboring states. Maryland recognizes that the Commonwealth of Virginia utilizes many of the FCC-defined 700 MHz “state” channels for low-power use and aircraft operations in Maryland could easily interfere with Virginia’s operations. Both Delaware and Pennsylvania have emerging 700 MHz state networks as well. Maryland also recognized that even low power aircraft transmissions, such as described in the NPSTC Petition, can travel for ranges of up to approximately 100 miles. Depending upon the operation of a Maryland aircraft, interference on a “state” channel could extend beyond the borders of the State’s neighbors and reach into Ohio and New Jersey.

Maryland believes that the optimum strategy for coordinating the use of these channels is to require operational management and approval by the Statewide Interoperability Coordinators (“SWIC”). The primary purpose of the Petition is to permit interoperable communications between public safety aircraft, their operational control bases, and local or state on-scene first responders. SWICS are recognized by the FCC, Department of Homeland Security (“DHS”), and the entire first responder community as coordinators of interoperability. The SWICS routinely work to promote intra as well as interstate interoperability and

these public safety communications leaders are uniquely qualified to coordinate the use of these channels in all of the states.

As noted earlier, the State of Colorado has filed an application with the FCC to operate temporary stations at various locations on these frequencies. With Interoperability channels available subject to state plans⁸, the state's SWIC can coordinate usage of the 700 MHz Interoperability channels and potentially facilitate use at local incident scenes as well as air-to-ground operations.

Summary

Maryland believes that this Petition represents a critical step in providing 700 MHz channels for first responder aircraft operations. Currently there are no national 700 or 800 MHz channels specifically identified for air-to-ground operations even though the 700 MHz and 800 MHz bands represent some of the most extensively used spectrum in the nation. Maryland believes that action on the Petition is extremely important for state and local government aircraft providing support for first responders as well as the victims of traumatic injuries. Maryland also suggests that the issues identified in the Petition are of a nationwide and international scope meriting a national rule making by the FCC.

From the international perspective, operation of 700 MHz air-to-ground channels may be subject to the issues associated with "Line A" and require coordination with Industry Canada pursuant to international treaties. From an operational perspective, first responders in both the United States and Canada have close working relationships in border areas and a rulemaking procedure would include coordination with our friends north of America.

⁸ See 47 CFR §90.525(a)

The State requests the FCC to open a proceeding permitting the merits of the Petition to be more precisely identified and presented for consideration. Maryland believes that a rulemaking procedure is in the public interest and looks forward to the opportunity to provide more information on this important matter pursuant to FCC action.