Ms. Mindel De La Torre  
Chief of the International Bureau  
Federal Communications Commission  
445 12th Street SW  
Washington, DC 20554  

Dear Ms. De La Torre:  

The National Telecommunications and Information Administration (NTIA) on behalf of the Executive Branch agencies, approves the release of the attached Executive Branch proposal for WRC-12 agenda items 1.3.

NTIA proposes no change in the use of the band 5091-5150 MHz for unmanned aircraft systems (UAS) operations.

NTIA considered the Federal agencies’ input toward the development of U.S. proposals for WRC-12. NTIA forwards this package for your consideration and review by your WRC-12 Advisory Committee. Dr. Darlene Drazenovich is the primary contact from my staff.

Sincerely,  

Karl B. Nebbia  
Associate Administrator  
Office of Spectrum Management
UNITED STATES OF AMERICA

DRAFT PROPOSAL FOR THE WORK AT THE CONFERENCE

Agenda Item 1.3: to consider spectrum requirements and possible regulatory actions, including allocations, in order to support the safe operation of unmanned aircraft systems (UAS), based on the results of ITU-R studies, in accordance with Resolution 421 (WRC-07)

Background Information: Method B1 in the Draft CPM Report contemplates a new aeronautical mobile (route) service (AM(R)S) allocation for UAS command and control in portion(s) of various bands including 5 091-5 150 MHz subject to satisfactory results of compatibility studies.

The 5 091-5 150 MHz band was originally reserved as an expansion band for microwave landing system (MLS) but now is also allocated to the fixed-satellite service (FSS) for use by mobile-satellite service (MSS) Earth-to-space feeder links. Furthermore, the 2007 World Radiocommunication Conference (WRC-07) decided to add allocations to the band for AM(R)S and aeronautical mobile service (AMS). Existing and planned systems include satellite feeder uplinks, airport surface communication systems, aeronautical mobile telemetry systems, and aeronautical security systems. See No. 5.444B (WRC-07).

Resolution 748 details complex sharing criteria to ensure the compatibility of the AM(R)S with respect to incumbent services and systems including the FSS and the MLS. Considering f) of Resolution 748 states that the aggregate interference from aeronautical security, aeronautical telemetry and AM(R)S should total no more than 3% ΔTs / Ts. WRC-07 based this conclusion on extensive sharing studies conducted during the study cycle preceding WRC-07.

Similarly, Resolutions 418 and 419 (WRC-07) specify complex sharing criteria to ensure the compatibility of the AMS for telemetry, and the AMS for security, respectively, with respect to incumbent services including the FSS and the MLS.

In summary, given the existing allocations and users, the 5 091-5 150 MHz band is already heavily occupied, or expected to be in the near future, and use of this band is constrained by complex sharing arrangements. Coordinating any use of this spectrum for UAS would be difficult especially given that little interference margin would remain after accommodating the existing services and applications. It is thus not practical to consider use of the 5 091-5 150 MHz band for UAS command and control.

Proposal:

ARTICLE 5

Frequency allocations

Section IV- Table of Frequency Allocations
NOC USA/1.3/1

4800-5570 MHz

<table>
<thead>
<tr>
<th>Allocation to services</th>
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<td>Region 1</td>
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<tr>
<td>5091-5150</td>
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**Reasons:** Given that the band is heavily used and operation is constrained by complex sharing criteria, it is not practical to consider the use of this band for applications such as UAS command and control.