

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

IN THE MATTER OF

Wireless Telecommunications Bureau Seeks to Refresh Record on

Unmanned Aircraft Systems Use of 5 GHz Band

Docket RM-11798; DA 21-1025

REPLY COMMENTS OF THE SMALL UAV COALITION

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The Small UAV Coalition (“Coalition”)¹ files these comments in reply to the public comments submitted in response to the Wireless Telecommunications Bureau’s request for comments on refreshing the record on Unmanned Aircraft Systems (“UAS” or “drone”) use of the 5 GHz band, specifically the use of the 5030-5091 MHz band for Control and Non-Payload Communications (“CNPC”), as initially set forth in a petition for rulemaking by the Aerospace Industries Association (“AIA”). 86 Fed. Reg. 50715 (Sept. 10, 2021). The Coalition urges the Federal Communications Commission (“FCC” or “Commission”) to consider the following points as it considers a rulemaking regarding drone use of the 5030-5091 MHz band.

1. The 5030-5091 MHz band should not be the exclusive band for drone operations, even as to CNPC. The Commission should not designate the 5030-5091 MHz band the exclusive band for drone operations, whether for CNPC or other UAS communications. Several commenters agree. *Florida Power & Light Company* comments at page 4; *MatrixSpace, Inc.* comments at 2; *CTIA* comments at pages i, 9. Regardless of whether the band is limited to controlled airspace, the

¹ Members of the Small UAV Coalition are listed at www.smalluavcoalition.org

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Coalition urges the FCC to determine that other spectrum bands may be used by UAS operators, even for CNPC. The FCC has granted experimental licenses in over 20 other spectrum bands for drone operations. The Coalition believes the relative merits of these bands, as well as bands used by mobile networks, vis-à-vis the 5030-5091 MHz band, should be evaluated in parallel with its rulemaking proceeding relating to the 5030-5091 MHz band.

Like other users of wireless spectrum, the UAS ecosystem will benefit from the continued application of the FCC's flexible use policy for spectrum that allows a licensee to utilize the spectrum in the manner that the licensee deems best, subject to the technical specifications set forth by the Commission. Rather than tying drone operations, even particular types of drone operations, to a particular spectrum band, spectrum users should have flexibility to use bands for the use cases that best fit the need of the UAS industry, which may change over time as the industry matures.

2. The Commission should clarify that the 5030-5091 MHz band will be available for drone operations at any altitude and in uncontrolled airspace. AIA's comments are not clear whether it intends this band to be used only for drone operations in controlled airspace or also in uncontrolled airspace. *AIA* comments at pages 2, 11. As noted in the Coalition's initial comments, RTCA SC-228 Minimum Operations Performance Standards ("MOPS") for Command and Control ("C2"), on which AIA's petition heavily relies, are focused on operations in controlled airspace. The Coalition agrees with many commenters who do not favor an altitude limit for use of the spectrum, which conceivably could be a floor (no drone operations below a certain altitude) or ceiling. The Coalition agrees that this band should be available at any altitude, and in uncontrolled as well as controlled airspace, in consideration of drone flights that operate from the ground to Class A airspace.

3. The 5030-5091 MHz band should not exclude Part 107 operations or operations of drones that do not have type or airworthiness certification. *ALA*'s comments at page 2 suggest, and *Wisk Aero*'s comments at page 5 recommend, excluding Part 107 operations, as well as operations without a type certificate, from use of the 5030-5091 MHz band. Such exclusions are unsupported and unwarranted. The Coalition does not support any exclusion based on the type of commercial drone operation. Drones operating under Part 107 will need CNPC or other communications for which the spectrum may be used, The FCC should adopt flexible policies for the spectrum and not constrain it to only certain use cases, because that flexibility will encourage deployment and adoption, and allow the use of the spectrum to adapt as the industry develops.

4. The Commission's rulemaking should not bind the Commission's future drone decision-making. The Coalition agrees with *CTIA* comments at pages ii and 14 that the FCC should clarify that the actions taken within this proceeding are not necessarily setting binding precedent, or even an anticipated baseline framework, for future UAS spectrum policy. While it may be that the policies adopted in this proceeding are ones that will logically be applied in future UAS spectrum proceedings, just as the Commission's flexible use spectrum policies have remained the default wireless spectrum policies for more than a decade, the Commission should make clear that today's decisions are not binding and may be altered as the needs of the UAS industry change. Thus, the Coalition asks the Commission to explicitly state that this allocation and the technical rules that govern such allocation shall not serve as a precedent binding on subsequent Commission UAS spectrum decisions.

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In particular, the Coalition recommends that any technical requirements adopted for the 5030-5091 MHz band not be used as a template for future UAS spectrum, as different spectrum band requirements may be suitable for different use cases.

5. The Commission must work with the Federal Aviation Administration to harmonize spectrum and UTM. The FAA is developing a network-based UTM system that will include CNPC and well as payload communications, initially in low altitude airspace. The Coalition urges the FCC to participate with the FAA and the UAS industry in UTM development and implementation. CNPC UAS operations will need to be coordinated among different operators and spectrum licensees, regardless of the manner in which CNPC UAS operations are conducted. Given that coordination of CNPC UAS operations will be a UTM component, the Coalition is concerned about setting up a separate UAS coordination system as part of the 5030-5091 MHz rulemaking. A separate coordination system would only add unnecessary complication to UAS operations, resulting in inefficiencies, higher costs, and safety risks. Accordingly, the FCC's spectrum decisions must be made in sync with the FAA's development of a UTM system, even if few or many drone operations in the 5030-5091 MHz band operate outside of a UTM system.

CONCLUSION

If the Commission decides to embark on a rulemaking with respect to the 5030-5091 MHz band, it should continue its successful flexible use spectrum policies that permit but do not restrict access to the spectrum, should not prejudice the use of other spectrum bands, and should not adopt rules that set an unyielding precedent for future drone spectrum allocations.

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Respectfully submitted,



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