Before the
Federal Aviation Administration

Safe, Efficient Use and Preservation of the Navigable Airspace	))	Docket No. FAA-2006-25002 Notice No. 06-06

COMMENTS OF THE FIXED WIRELESS COMMUNICATIONS COALITION

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The Fixed Wireless Communications Coalition (FWCC) hereby comments on the Notice of Proposed Rulemaking in the above-captioned proceeding.[1]

About the FWCC. The Fixed Wireless Communications Coalition is a coalition of companies, associations, and individuals interested in the Fixed Service -- *i.e.*, in terrestrial fixed microwave radio communications. Our membership includes manufacturers of microwave equipment, licensees of terrestrial fixed microwave systems and their associations, and communications service providers and their associations. The membership also includes railroads, public utilities, petroleum and pipeline entities, public safety agencies, cable TV providers, backhaul providers, and/or their respective associations, common carrier and private communications carriers, and telecommunications attorneys and engineers. Our members build, install, and use both licensed and unlicensed point-to-point, point-to-multipoint, and other fixed wireless systems, in frequency bands from 900 MHz to 95 GHz.[2]

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[1] *Safe, Efficient Use and Preservation of the Navigable Airspace*, Docket No. FAA-2006-25002, Notice No. 06-06, 71 Fed. Reg. 34028 (June 13, 2006) (NPRM).

[2] For more information, see www.fwcc.us.

About the Fixed Service. Fixed Service facilities use microwave radio signals for communications among fixed locations. (The ubiquitous sideways-facing dishes on buildings and towers are Fixed Service antennas.) The Fixed Service towers and frequencies at issue in this proceeding carry public safety communications (including police and fire vehicle dispatch), coordinate the movement of railroad trains, control natural gas and oil pipelines, regulate the electric grid, and backhaul wireless telephone traffic, among other critical services.

Many critical Fixed Service facilities are designed for, and routinely achieve, 99.999% or 99.9999% availability. These levels correspond to total cumulative outages of 5 minutes and 30 seconds *per year*, respectively.

To accommodate users' fast-changing needs, operators sometimes must institute or change service quickly. Delays in service can threaten public safety communications, put at risk the safe operation of railroads, pipelines, and electric distribution systems, and disrupt wireless telephone service.

A. Introduction

The FAA proposes two rule changes that are of great concern to the FWCC.

One would require 60 days' notice prior to commencement of, or certain changes to, operation in certain frequency bands used by the Fixed Service. These include 932-935 MHz, 952-960 MHz, 3700-4200 MHz, 5925-6525 MHz, and 21.2-23.6 GHz.

The other proposal would extend the notice period of tower construction from 30 days to 60 days.

We show below that the FAA lacks the necessary statutory authority to implement the first change, and that either change would threaten the integrity of public safety and critical infrastructure communications services.

B. The FAA Lacks Authority to Regulate Spectrum Use.

The FAA's proposal to require 60 days' notice of operation in certain frequency bands is unlawful.

Like every other administrative agency, the FAA has no power to act in the absence of a delegation of authority from Congress. The Supreme Court says:

> [N]o matter how important, conspicuous and controversial the issue, and regardless of how likely the public is to hold the Executive Branch politically accountable, *an administrative agency's power to regulate in the public interest must always be grounded in a valid grant of authority from Congress*.[3]

In particular, no matter how well-meaning the FAA's intention to prevent electro-magnetic interference (EMI) from disrupting air navigation, nothing in its charter bestows the authority to monitor and control the use of radio frequencies. That is the province of the Federal Communications Commission (FCC) and the National Telecommunications Information Administration (NTIA).[4] The sole recourse of the FAA, as a Government agency, is through the NTIA and its Interdepartment Radio Advisory Committee (IRAC). But NTIA's jurisdiction extends only to those frequencies

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[3] *Food and Drug Administration v. Brown and Williamson Tobacco Corp.*, 529 U.S. 120, 161 (2000) (striking down FDA attempt to regulate cigarettes) (emphasis added).

[4] *See* 47 U.S.C. Sec. 301 ("It is the purpose of this chapter [delegating authority to the FCC], among other things, to maintain the control of the United States over all the channels of radio transmission; and to provide for the use of such channels . . . .")

allocated to the Government, either exclusively or on a shared basis with non-Government users. *Most of the Fixed Service bands at issue in this proceeding have no Government allocation*.[5] Even their out-of-band emissions into adjacent Government bands are regulated by the FCC -- not the NTIA, and certainly not the FAA.[6]

The NPRM offers no adequate support for the extraordinarily far-reaching and unprecedented attempt to broaden the FAA's powers. The ostensible source of authority is the Airport and Airway Safety and Capacity Expansion Act of 1987.[7] In situations where "the construction or alteration of any structure may constitute an obstruction of navigable airspace or an interference with air navigation facilities and equipment or navigable airspace," this statute authorizes the FAA to conduct an aeronautical study to determine the impact, if any, on the safe and efficient use of such airspace, facilities and equipment.[8] Nothing in the statute authorizes the FAA to put limitations on the provision of FCC-regulated radio services.

The FAA therefore must look outside the statute, to two small shards of legislative history. First, the Conference Report on the 1987 Act defines "interference," as used the passage quoted above, to include both physical and electromagnetic effects.[9]

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[5] In particular, 952-960 MHz, 3700-4200 MHz, and 5925-6525 MHz have no Government allocation and are under exclusive control of the FCC.

[6] *See* 47 C.F.R. Sec. 101.111.

[7] P.L. 100-223 (101 Stat. 1522), *codified at* 49 U.S.C. 44718.

[8] 49 U.S.C. Sec. 44718(b)(1).

[9] H.R. Report No. 484, 100th Cong., 1st Sess.; *reprinted at* 1987 U.S. Code Cong. & Admin. News 2630, 2660.

Second, the same report notes that the Senate version of this passage had been adopted by the conferees, but "modified to clarify that requirements cover structures which create electromagnetic interference."[10] That clarification does not appear in the statute. Nevertheless, based on these thin reeds, the FAA tentatively concludes, "[i]t is evident by the legislative history of this statutory provision that Congress intended for the FAA to include EMI as a factor during aeronautical studies."[11]

In *Brown and Williamson*, above, and a legion of other cases, the courts have consistently held that administrative agencies cannot extend their regulatory authority beyond the charge given them by Congress.[12] Looking at the legislative history and the agency's past practice, in addition to the statutory language, each case found that an agency had overreached its authority by attempting to regulate beyond its statutory mission.

Judged in this light, the FAA's tentative conclusion fails on all counts. First and foremost, both the text of the Act itself and the legislative history concern themselves exclusively with the impact of proposed and existing "structures." Nothing in the Act or the legislative history grants the FAA the authority to deal with radio operations from those structures. Metal structures themselves can, of course, "create electromagnetic interference" without regard to radio transmissions that may originate there. Those

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[10] *Id*.

[11] NPRM, 71 Fed. Reg. at 34032.

[12] *See, e.g.*, *United States v. Mead Corp*., 533 U.S. 218 (2001); *Motion Picture Association of America v. FCC*, 309 F.3d 796 (DC Cir. 2002); *Ry. Labor Executives Ass'n v. National Mediation Board*, 29 F. 3d 655 (DC Cir. 1994) (en banc).

effects come within the statute. Indeed, the Conference Report's reference to electromagnetic interference, rather than radio interference, suggests that legislators had in mind the properties of the tower itself. Surely if Congress had meant to assign the FAA an additional, gatekeeper role in the analysis and regulation of radio signals, it would have done so in some less oblique fashion than the FAA posits here.

In effect, the FAA proposes to duplicate and usurp the plenary role given by Congress to the FCC.[13] Its attempt to bootstrap the congressional charge for a the study of "structures" into a study of radio-frequency emanations from the structures goes beyond the mandate. As the Supreme Court put it in *Brown and Williamson*, "Congress could not have intended to delegate a decision of such economic and political significance to an agency in so cryptic a fashion."[14]

The menu of criteria cited in the statute for FAA consideration in the air hazard context is also a significant limitation. Those criteria are:

- the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules and instrument flight rules;
- the impact on existing and planned public use airports and facilities; and
- the cumulative impact of the proposed construction when combined with other existing or proposed structures.[15]

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[13] The FCC regulates "all interstate and foreign communications by wire and radio and all interstate transmission of energy by radio, which originates and/or is received by radio within the United States." 47 U.S.C. Sec. 152(a).

[14] 529 U.S. at 161.

[15] 49 U.S.C. Sec. 44718(b)(1).

In *DC Federation of Civic Ass'ns v. Volpe*,[16] the secretary of transportation was held to have erred by taking into account factors outside those specified in the operative statute. The case has come to stand for the proposition that discretionary decisions by administrative agencies must "be based only upon those factors that the legislature as a whole has authorized or directed the agency to consider."[17] Here the statute specifically lays out the factors to be considered by the agency in assessing air hazards created by structures. EMI is not among them. Accordingly, the FAA is barred by negative implication from considering that factor in its air hazard review.

The legislative history relied on by the FAA is similarly unavailing. As noted above, the Senate language refers specifically to "structures" which create "electromagnetic" interference – not to transmitters or other energy emissions from facilities *on* the structures.

Finally, it is significant that the FAA has not in the past interpreted this statutory provision to authorize its regulation of electromagnetic radiation. The courts give considerable weight to an agency's historical interpretation of a statutory delegation of power.[18] After 19 years, it is indisputable that the FAA has not heretofore viewed its 1987 congressional mandate as requiring or authorizing analysis of EMI.

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[16] 459 F. 2d 1231 (DC Cir. 1972), *cert. denied*, 405 U.S. 1030 (1972).

[17] Administrative Law and Process, Gellhorn and Boyer, 1982 at p. 72.

[18] *Barnett v. Weinberger*, 818 F.2d 953, 960-61 (D.C. Cir. 1987).

On all three criteria applied by the courts, therefore, the FAA's claim of authority cannot be justified. And it bears noting that the normal *Chevron*[19] deference accorded an agency's interpretation of its governing statute does not apply here. *Motion Picture Association*, above, makes it clear that an agency is entitled to *no* deference absent a valid delegation of power.[20]

In short, the FAA has no authority from Congress to impose the kind of regulatory regime with respect to EMI that the current proposal envisions. Without such a delegation, the FAA cannot lawfully adopt the regulations.

C. A Broad Requirement for Sixty Days' Notice Prior to Frequency Usage and/or Tower Construction Is Impracticable and Unnecessary.

1. The proposal would delay critically needed communications.

Fixed Service providers can move quickly, when they have to -- and they often have to. The FCC rules permit "conditional licensing," that is, operation while an FCC application is pending (with some exceptions).[21] A Fixed Service user needing a new or modified link can activate it, in most cases, as soon as frequency coordination is complete. Although the FCC rules contemplate frequency coordination taking as long as 30 days,[22] in practice the coordinators can complete the process in five days, when

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[19] *Chevron USA Inc. v. Natural Resources Defense Council, Inc*., 533 U.S. 218 (2001).

[20] *Motion Picture Association of America v. FCC*, 309 F.3d at 801.

[21] 47 C.F.R. Sec. 101.31(b). The exceptions include, among others, applications for stations near an international border or that require a waiver. *Id*.

[22] 47 C.F.R. Sec. 101.103(d)(2)(iv).

necessary. The combination of conditional licensing and expedited coordination allows public safety agencies, railroads, pipeline operators, electric utilities, wireless telephone providers, and other critical infrastructure entities to keep their communications facilities abreast of changing circumstances.

The proposed requirement to give the FAA 60 days' notice of a new link, a frequency change, or a power increase would create a new and serious impediment, one that would cripple the ability of Fixed Service users to respond nimbly to changing circumstances. That in turn would impede the ability of infrastructure operators to meet the needs of a mobile public and a rapidly evolving economy.

Many Fixed Service antennas are mounted on structures such as buildings, water towers, and existing radio towers. Those do not need new FAA approvals. When an antenna does need new tower construction, time is usually of the essence. The FAA process already causes substantial delays in getting urgently needed communications facilities on the air. The proposal to add another 30 days to that process would further weaken the industry's ability to address our customers' urgent needs for communications.

2. The FAA has not shown that the enormous burden of its proposals is justified.

The NPRM proposes to inflict a huge paperwork burden on spectrum users, but does not show concomitant benefits.[23] No one disputes that flight safety is of paramount importance. But the only link given in the NPRM between the proposed regulations and flight safety is a list of statements that operation in one or another band "could" affect a

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[23] There would also be a huge burden on the FAA, with the need to sift through vast numbers of additional filings every year.

nearby aeronautical band. That by itself is insufficient to constitute a rational basis for imposing onerous and expensive requirements.

3. The proposed regulations would be impossible to enforce.

The rules in the NPRM would depend for their effectiveness on near-100% compliance. If routine operations in the specified bands really do threaten air safety, as the FAA suggests, then even a small percentage of unreported transmissions must be unacceptable.

The Fixed Service takes its regulatory responsibilities seriously, having an enviable record of compliance with FCC rules. The industry will comply in full with any additional FAA requirements. But the frequency bands listed in the NPRM also house a very large number of small users, many of whom are unlikely even to become aware of FAA regulations. The 5000-5650 MHz band in particular overlaps with newly expanded unlicensed frequencies.[24] These may be used, for example, for fixed Internet access, in-home audio and video, and widespread commercial and industrial data applications. Unlicensed users ordinarily have no contact with the FCC or any other regulatory body. Expecting them all to give the FAA 60 days' notice before using their equipment would be unrealistic, to say the least. And even if the FAA were to make an exception for the vast unlicensed community, the very large numbers of licensed users in the specified bands would still produce a low compliance rate.

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[24] *See* 47 C.F.R. Sec. 15.401.

4. The FAA can better accomplish its goals by screening the FCC licensing database.

The data the FAA needs for screening purposes already exists in an orderly, accessible form, in the FCC's licensing database. As an alternative to collecting its own data from spectrum users, the FAA could meet its needs at far lower cost, and with far less burden on the public, by arranging with the FCC for an electronic review of newly filed license applications. Those applications that meet predetermined criteria could then be pulled out for more detailed examination.[25]

CONCLUSION

The proposals in the NPRM are wanting in several respects. They lack the necessary statutory authority. They would create an unprecedented burden on the Fixed Service, among other radio services, by imposing cost and delay on otherwise routine changes needed for critical infrastructure communications. There is no reasonable expectation of compliance adequate to accomplish the stated purpose. And, in any event, the FAA has failed to show that the proposals have a rational basis in producing a benefit sufficient to justify the burden.

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[25] The comments of Marcus Spectrum Solutions filed in this docket examine such an arrangement at greater length.

The U.S. Government already has an agency with great expertise in monitoring and regulating use of the radio spectrum. Rather than set up a parallel and far less efficient mechanism, the FAA should take its needs to the FCC.

Respectfully submitted,

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September 11, 2006

VERIFICATION

Pursuant to Title 18 United States Code Section 1001, I, Mitchell Lazarus, Co-Chairman of and counsel to the Fixed Wireless Communications Coalition, in my individual capacity and as the authorized representative of the pleader, have not in any manner knowingly and willfully falsified, concealed or failed to disclose any material fact or made any false, fictitious, or fraudulent statement or knowingly used any documents which contain such statements in connection with the preparation, filing or prosecution of the pleading. I understand that an individual who is found to have violated the provisions of 18 U.S.C. section 1001 shall be fined or imprisoned not more than five years, or both.

Executed this 11th day of September 2006 at Arlington Virginia.