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Federal Communications Commission
Office of the Secretary

November 23, 2008

Via ECFS

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Ex Parte Presentation in: WT Docket No. 07-293, IB Docket No. 95-91, Gen. Docket 90-357, RM No. 8610

Dear Ms. Dortch:

On November 17, 2008, the Aerospace & Flight Test Radio Coordinating Council ("AFTRCC") submitted an *ex parte* in the above-referenced proceedings in which the Federal Communications Commission ("FCC" or "Commission") has proposed to adopt new rules to govern ongoing terrestrial repeater operations by Sirius XM Radio ("Sirius XM") and to adjust certain existing rules governing WCS operations that relate to the ability of these services to coexist with one another.¹ In more the more than 10 years of this proceeding, we are not aware that the Commission has proposed changes to the existing out-of-band emission ("OOBE") limits on WCS signals into the shared Government/Non-Government aeronautical telemetry band 2360-2390 MHz, which is adjacent to the upper WCS block of 2345-2360 MHz. This letter provides a response from NextWave Wireless Inc. ("NextWave") and Horizon Wi-Com ("Horizon") to the AFTRCC *ex parte*.

In its *ex parte*, AFTRCC proposes that a new set of stringent OOBE limits be established for WCS signals into the aeronautical telemetry band 2360-2390 MHz. Since WCS was first established in 1997, the Commission's rules have required WCS licensees to attenuate their emissions by at least $43+10 \log(P)$ between 2360-2370 MHz and by at least $70 + 10 \log(P)$ above 2370 MHz.² Although AFTRCC participated extensively in the proceeding establishing the WCS rules,³ AFTRCC did not petition for reconsideration of the adoption of

¹ Letter from William K. Keane, Counsel for Aerospace and Flight Test Radio Coordinating Council to Marlene H. Dortch, Secretary, FCC, WT Docket 07-293 (filed November 17, 2008) ("AFTRCC *ex parte*").

² See *WCS Report and Order*, 12 FCC Rcd at 10854. In the *Notice of Proposed Rulemaking* ("WCS NPRM") that first proposed the creation of WCS, the Commission proposed that for fixed operations, all OOBE from fixed WCS facilities be attenuated by $43+10 \log(P)$ on all frequencies above 2360 MHz. For mobile operations, the *WCS NPRM* proposed that all WCS OOBE be attenuated by $43+10 \log(P)$ between 2360-2370 MHz and by $70+10 \log(P)$ above 2370 MHz. *Amendment of the Commission's Rules to Establish Part 27 of the Wireless Communications Service* ("WCS"), Notice of Proposed Rulemaking, 11 FCC Rcd 21713, 21731 (1996) ("WCS NPRM").

³ See Comments of Aerospace and Flight Test Radio Coordinating Council, GN Docket No. 96-228 (filed Dec. 4, 1996); Reply Comments of Aerospace and Flight Test Radio Coordinating Council, GN Docket No. 96-228 (filed Dec. 16, 2006).

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the WCS OOB limits or otherwise indicate that its telemetry constituents would be unable to address the emission levels that WCS was permitted.⁴ Yet today, AFTRCC claims that it has relied for eleven years on a “de facto protection limit” of $110+10\log(P)$ and that, if this limit is changed, its aeronautical telemetry operations will suffer significant amounts of new interference from WCS mobile operations, which have been “effectively precluded” from using the band to date.⁵

This is simply not the case. There will be absolutely no impact from relaxation of the WCS $110+10\log(P)$ OOB limit to aeronautical telemetry operations in 2360-2390 MHz. This limit applies only to the 2320-2345 MHz band where Sirius XM operates. The WCS OOB limit governing the protection of the 2360-2390 MHz aeronautical telemetry band is (and has been) $43+10\log(P)$ from 2360-2370 MHz and $70+10\log(P)$ above 2370 MHz. This limit has been in place since inception of the WCS band and no proposals to relax this rule have been made. Therefore, the AFTRCC claim that it has been relying on the $110+10\log(P)$ limit for protection and that relaxation of this limit will negatively impact its band is completely unfounded. There will be no impact to AFTRCC from relaxation of the WCS OOB limit into the 2320-2345 MHz SDARS band, which is the subject of this proceeding - not a change to the WCS OOB limit into the aeronautical telemetry band.

Not only does AFTRCC wrongly state that there will be new interference to aeronautical telemetry operations in the 2360-2390 MHz band from a relaxation of the $110+10\log(P)$ OOB limit, it proposes that new stricter OOB limits be adopted above and beyond the current levels that already exist to protect aeronautical telemetry – levels that were established in 1997 and are unrelated to the ability of SDARS and WCS to coexist. In its *ex parte*, AFTRCC proposes new OOB limits for WCS operations into the 2360-2390 MHz band that are 10-20 dB more stringent than the current rules. Given that there has been no interference under the current rules to aeronautical telemetry from existing WCS operations, which are utilizing FCC type-accepted fixed devices operating at much higher power levels than WCS mobile devices would, there is no reason to expect there will be any interference under these same rules when low power WCS devices begin operations.⁶ Moreover, were

⁴ The Commission's decision regarding WCS OOB limits into aeronautical telemetry was hardly an aberration. The need for telemetry operators to protect themselves against adjacent channel interference was driven home again five years later when, in 2002, the Commission reallocated the 2385-2390 MHz for a Part 27 fixed and mobile service that would operate adjacent to telemetry (just as WCS does). See *Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands*, Report and Order, 17 FCC Rcd 9980 (2002) (“27 MHz Report and Order”). Under the Part 27 rules for that service, licensees were required to attenuate their OOB by $43+10\log(P)$ into the aeronautical telemetry band. See *id.* at 10046. Although the Commission ultimately reversed that allocation and returned the spectrum for exclusive use by the telemetry community as part of an arrangement to free spectrum from Government use for the Advanced Wireless Service (“AWS”), the message regarding OOB levels to AFTRCC and its constituents could not have been clearer.

⁵ AFTRCC *ex parte* at 2.

⁶ In its attempt to justify revisions to the decade old rules governing WCS emissions into the 2360-2390 MHz band, AFTRCC relies on implausible, if not impossible, scenarios under which WCS emissions will interfere with aeronautical mobile telemetry ground station operations. With its analysis, AFTRCC suggests that the



these new more stringent rules adopted, existing WCS operators providing fixed broadband services would have to recall and replace all of the equipment currently in operation. There is no evidence that the current limits are inadequate to protect aeronautical telemetry services to justify disruption to existing fixed WCS broadband services.

Last summer, engineers from WCS licensees, including NextWave and Horizon, met with engineers from AFTRCC to discuss technical issues related to the current proceeding. At that time and since, the WCS licensees did not suggest changing the existing OOB limits for WCS licensees with respect to aeronautical telemetry, and explained that the WCS Coalition proposal recommends changes only to the OOB limits into the SDARS band. The WCS engineers discussed their analysis showing the low power level at which WCS mobiles will operate and how path loss and lack of proximity to aeronautical telemetry receivers will make interference highly improbable. As described above, not only are the proposals of AFTRCC without technical merit, these proposals seek for private aeronautical telemetry (the collection of flight test data during the design and development process by commercial aircraft manufacturers) greater protection than is currently afforded to federal users of the 2360-2390 MHz band. Based on the record in this proceeding, federal users have not requested a change in this protection level.

NextWave and Horizon Wi-Com look forward to working with the FCC Commissioners and staff to bring this rulemaking, after more than ten years of uncompleted action, to a conclusion that should not be further delayed. This rulemaking will enable both Sirius XM and WCS licensees to move forward and advance their service offerings in the public interest.

Respectfully submitted,

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emissions from a single WCS mobile device located within a building would be powerful enough to interfere with an aeronautical mobile telemetry ground station located more than 60 miles away. Such a finding should raise serious doubts with the Commission regarding the validity and relevancy of such an analysis.