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

In the Matter of	)	
	)	
Amendment of Parts 0, 1, 2, and 15 of the Commission's Rules regarding Authorization of Radiofrequency Equipment	)	ET Docket No. 13-44 RM-11652
	)	
Amendment of Part 68 regarding Approval of Terminal Equipment by Telecommunications Certification Bodies	)	

To: The Commission

COMMENTS OF AEROSPACE AND FLIGHT TEST RADIO COORDINATING COUNCIL

Aerospace and Flight Test Radio Coordinating Council ("AFTRCC"), by its counsel, hereby submits its Comments on the Notice of Proposed Rulemaking ("Notice" or "NPRM") in the above-captioned proceeding.[1] As explained further below, AFTRCC supports the thrust of the Commission's proposals, especially as those proposals may affect equipment authorization procedures for Medical Body Area Network systems ("MBANs").

Introduction

AFTRCC is an association of the nation's principal aerospace manufacturers (see Attachment). AFTRCC was founded in 1954 to serve as an advocate for the aerospace industry on matters affecting spectrum policy. AFTRCC is also the recognized non-Federal Government coordinator for the shared, Government/Non-Government spectrum allocated for flight testing. AFTRCC works closely with Government Area Frequency Coordinators, who are responsible for

[1] FCC 13-19, released February 15, 2013, 78 Fed. Reg. 25916 (May 3, 2013).

Federal Government use of the spectrum, in an effort to ensure that interference-free flight test operations are protected, and flight safety maximized.

Background

By virtue of the instant Notice, the Commission proposes to effect numerous changes to the rules and procedures applicable to equipment authorization for intentional and unintentional radiators. Among these are proposals to delegate to the telecommunications certification bodies ("TCBs") equipment authorization for all RF devices subject to the certification procedure (*id.*, para. 18); establish pre-approval guidance procedures under which TCBs will be required to consult with the Commission before granting authorization for certain types of equipment, and secure the Commission's concurrence for such grants (*id.*, paras. 19, 21); require that all laboratories performing certification testing be accredited (*id.*, para. 49); and adopt updated American National Standards Institute ("ANSI") test standards (*id.*, para. 67).

As the Commission is aware from AFTRCC's filings in ET Docket No. 08-59, AFTRCC has maintained a focus on ensuring that MBANs equipment complies with the rules adopted by the Commission in the First Report and Order.[2] The MBANs Rules are complex because they seek to maximize the opportunity for secondary MBANs operations while ensuring that primary AMT operations are protected from harmful interference. Critical to the success of the rules are certain features that MBANs equipment must incorporate and which users may not alter. Compliance by manufacturers is essential to successful implementation of this novel approach to spectrum sharing between AMT and MBANs. Compliance is also necessary to ensure that MBANs devices not cause harmful interference to sensitive flight test telemetry receivers, and consequently threaten flight safety.

[2] 27 FCC Rcd 6422 (2012).

As the demand for spectrum by users of all types increases, the search for sharing solutions will intensify. In many ways, the MBANs regime represents a pioneering approach to increasing the utility of the nation's spectrum resources, albeit one specifically tailored to the characteristics of the incumbent primary and new secondary use in the band. The degree to which it is successfully implemented nonetheless will help establish a degree of confidence for primary incumbents, whether they be Government, non-Government, or (as in this case) both, that the rules adopted for new technologies will be properly enforced to protect their operations. The need for the MBANS regime to be successfully implemented is heightened given well-publicized recent incidents where rules for other new technologies have proven inadequate to ensure the absence of interference to sensitive incumbent facilities.[3]

AFTRCC's comments on discrete aspects of the Notice follow.

Discussion

AFTRCC supports the proposal to delegate equipment authorization to TCBs for the certification procedure -- provided the Commission couples that proposal with other safeguards spelled out in the Notice. Chief among these are the use of the pre-approval guidance procedure requiring that any TCB processing an application for MBANs secures the Commission's concurrence before issuing an authorization, and that all test laboratories be accredited.

MBANs devices are already on the exclusion list. It is a small step to ensure that such equipment likewise be among the defined categories subject to affirmative Commission concurrence prior to authorization.

---

[3] *See, e.g.,* Notice of Proposed Rulemaking in ET Docket No. 13-49, FCC 13-22, released February 20, 2013, 78 Fed. Reg. 21320 (April 10, 2013) at paras. 8-10 (discussing the unlawful modification of 5 GHz U-NII devices and the harmful interference caused to FAA weather radars). The devices were modified to operate over a wider range of frequencies than those for which they had been certified, and at higher power levels than allowed under the rules. This episode is instructive for MBANs certification given that MBANs, like RLANs, are allowed to operate with higher power in some bands than in others, i.e. 20 mW in 2390-2400 MHz, but only 1 mW in 2360-2390 MHz, yet in most cases are expected to operate over the entire range 2360-2400 MHz.

A concurrence requirement is especially appropriate given that test procedures for MBANs devices are not yet formulated. AFTRCC, GE Healthcare, and Philips Healthcare have elsewhere called attention to the need for clear and adequate test protocols for MBANs devices.[4]

On both counts, therefore, MBANs devices should be subject to the proposed pre-approval guidance procedure. The steps spelled out in para. 22 appear adequate to capture these processes.[5]

AFTRCC further supports the proposals to strengthen the assessment of TCB performance. As the Notice observes,

> Because we are proposing to allow TCBs to approve all RF equipment that is subject to certification, it will become increasingly important to ensure that recognized TCBs continue to meet all relevant Commission requirements and that we minimize the possibility that equipment could be certified without fully complying with our technical rules.

Id., para. 34.

AFTRCC urges that the Commission make clear that the ultimate sanction of de-certification may be considered whenever the Commission must impose sanctions for TCB performance failures (*see id.* at paras. 37-42). A Commission statement to that effect would serve an important enforcement purpose. If the agency delegates even more authority to such independent bodies, it must be careful not to confuse its message by suggesting, or even allowing the inference, that its enforcement regime is being relaxed at the same time. Just the opposite is required.

---

[4] *See* ex parte filed in ET Docket No. 08-59 September 7, 2012; Joint Petition for Reconsideration, Docket No. 08-59 filed October 11, 2012, at page 17.

[5] Consistent with its Comments, AFTRCC is not of the view that certification of MBANs devices should only be handled by the Commission itself. Of course, if compliance problems surface later, this might have to be revisited.

AFTRCC likewise supports the proposal to more clearly define, and strengthen, the post-approval surveillance authority of the TCBs. In this regard, it may be necessary in some circumstances for the Commission to secure special test software to verify a device's compliance with the Rules. *See id.*, para. 33. In AFTRCC's view, the obligation to supply such software should be incorporated in the rules as a condition of the equipment authorization process -- just as the staff frequently requests additional information of applicants for radio licenses.

With respect to testing labs, AFTRCC urges that such entities (including their subcontractors) be accredited according to the specified ISO standard. *See id.*, para. 49 *et seq.* As an important level of review and compliance for RF devices, this would complement the proposal to delegate more responsibility to TCBs. Further, as a part of the accreditation process, the Commission should adopt its proposal to maintain a list of accredited testing labs and the scope of equipment for which they are accredited. *Id.*, para. 51.

Many such labs are already accredited. *Id.*, para. 53. And while there are costs entailed in securing accreditation for the remainder, the significant responsibility that such labs bear is a factor that militates in favor of accreditation. This is <u>especially</u> the case for labs located outside the United States where knowledge of, or regard for, FCC requirements may be more attenuated. Thus, AFTRCC agrees completely that "the benefits of increased certainty that equipment tested by an accredited lab will comply with the Commission's technical requirements outweigh this burden." *Ibid.*

Finally, AFTRCC supports the proposal to incorporate in the Rules the updated ANSI standards for equipment testing. *Id.*, para. 67. Among other things, this would provide a basis for test labs to document any special software used to exercise the equipment under test. *Id.*,

para. 63. Beyond "documentation," equipment authorization applicants should be required to provide a copy of such software, if necessary, in order to evaluate compliance with the rules.

Conclusion

Accordingly, for the foregoing reasons, the Commission should adopt its proposals consistent with the points expressed herein.

Respectfully submitted,

AEROSPACE AND FLIGHT TEST RADIO COORDINATING COUNCIL

By: William K. Keane
R. Forrest Avett

Duane Morris LLP
505 9th Street NW
Suite 1000
Washington, D.C. 20004

Its Counsel

June 17, 2013

Aerospace and Flight Test Radio Coordinating Council Members

Bell Helicopter TEXTRON

BOEING

Gulfstream®
A GENERAL DYNAMICS COMPANY

NORTHROP GRUMMAN
Electronic Sensors & Systems Sector

BOMBARDIER
LEARJET

L3 communications
Integrated Systems

National Security Technologies LLC
Vision • Service • Partnership

Cessna
A Textron Company

Hawker Beechcraft

LOCKHEED MARTIN

SPIRIT AEROSYSTEMS

QUASONIX

NORTHROP GRUMMAN
ISA Integrated Systems and Aerostructures Sector

L3 Telemetry East

L3 communications
Communication Telemetry - East

LOCKHEED MARTIN
Enterprise Information Systems

Raytheon

Sikorsky
A United Technologies Company

HERLEY
Lancaster

SCALED COMPOSITES

Gilfillan

ITT Industries

Honeywell

Rockwell Collins

L3 communications
Telemetry-West

SAT CORPORATION
An Integral Systems Company www.sat.com

Agilent Technologies