



American Certification Body, Inc.  
6731 Whittier Ave, Suite C110  
McLean, VA 22101

Dear FCC:

American Certification Body, Inc. (ACB) offers its comments in RM-11708, NPRM-16239, and RM-11831 for consideration by the FCC.

ACB provides wireless certification services to a broad group of commercial and private technology companies, developing new technologies for growth of wireless services and functions. ACB views the development of young engineers and scientists in STEM as a critical mission for the United States.

To be competitive, the US must do all it can to promote and encourage youth to pursue careers in science and engineering.

The hobby of amateur radio (ham radio) has traditionally cultivated youth who go on to pursue careers in wireless and communications engineering. Many of our ACB's employees got their start in ham radio as youth.

We encourage the FCC to do everything it can to promote youth involvement in amateur radio and STEM.

Data experimentation, RF and antenna engineering and computer software development and coding in amateur radio offer great opportunities for the public, and particularly for our country's youth, to gain skills and experience. The publicly available hobby of amateur radio offers a unique playground for honing ones technical skills, soft skills, and developing a passion for technology that can stimulate a young person's interest in a STEM career.

We note that it is only though transparent, over-the-air data transmissions, that can be intercepted easily and openly by the public over-the-air, can we ensure that youth and teachers could participate in the hobby.

Using data transmissions that are not able to be decoded by others essentially bar new entrants from listening in and participating in amateur radio, and blocks them from experimenting with building radios or improving on coding and computer methods for over-the-air reception.

We value the public and open use of the amateur radio spectrum which relies on peer pressure and self-enforcement (FCC 13-1918), such that the amateur hobby ensures there is no traffic that is allowed to regularly bypass other commercial means (as specified in Part 97.113). We would never want to see amateur radio used to be used as a free and private substitute for commercial networks.

If data are allowed to exist which cannot be intercepted by others, the public and future entrants to the hobby, particularly youth and educators, cannot participate or build equipment or learn about what is being sent over the airways, and there is no way to know if the public airwaves are being used to carry commercial-style traffic that should be carried by an alternative commercial carrier (per 47 CFR § 97.113 - Prohibited transmissions).

RM-11831 has been endorsed by Prof. Rappaport of NYU WIRELESS, a ham radio operator himself and a foremost leader in education, and we share his view that the requirement of data transparency in amateur radio is an important step for improving the opportunity for future youth in ham radio that could help the US build strength in STEM. We ask the FCC to not broaden the access of data communications though RM-11708 or NPRM-16239 until the issue of data transparency is first addressed to ensure public accessibility in the airwaves of amateur radio, and we ask the FCC to be diligent to ensure that potential business use and business bypass are not allowed in the public spectrum of amateur radio.

Having completely open data transmissions in amateur radio will allow the hobby to engage youth and teachers, will ensure that ham radio can self-police as more complex data methods evolve, and will cultivate an open and inviting culture that we believe could encourage and attract youth to the hobby, which in turn would benefit the long term future of America.

With kind regards,

A handwritten signature in blue ink, reading "Michael F. Violette". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Michael F. Violette, P.E.  
Director