Chairman Ajit Pai
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Subject: \textit{ex parte} Comments on Docket 16-239 (Amateur Radio Symbol Rate NPRM)

Dear Chairman Pai:

I am writing on behalf of the Board of Directors of the Amateur Radio Safety Foundation, Inc. We govern the non-profit organization that supports the Winlink Global Radio Email® system. We are deeply concerned that the Commission may succumb to an internet and social media campaign led by Theodore Rappaport, resulting in a multitude of comments that echo false and misleading technical points, driven by highly emotional arguments about “national security, crime and terrorism.” Though these arguments have really little to do with the Docket No. 16-239 proceeding, they energize Rappaport's followers and amplify their story. The consequences of granting their requests are severe.

Rappaport has urged you in his letter of last November 15, to defer action on the NPRM in Docket No. 16-239 until the proponents address key issues relating to both homeland security and the future of self-monitoring in the Amateur Radio Service. We have prepared such a response (attached).

Rappaport and those he has inspired to comment also urge the Commission to disallow from the amateur bands advanced digital modes and protocols that are impractical, proprietary, or prohibitively expensive to intercept by a third party. To literally do so would have damaging consequences, including a significant economic impact on a number of small and medium entities in the amateur radio marketplace. It would remove many popular products and services from the amateur bands including Winlink, D*Star data, Fusion, HF-ALE, AMTOR, Clover, ARC-type and digital voice modes that use proprietary codecs or firmware, and others that are hard for a layman to intercept without the use of proprietary hardware, firmware or software.

DHS NCC SHARES, FEMA, MARS, and a myriad of state and local civil authorities, and NGO critical infrastructure partners rely upon licensed amateur radio operators as experts in operations and HF knowledge and as stewards of their stations. If the Commission cuts off amateurs from hard-to-monitor data protocols, they starve the federal government from its operating resources for SHARES, and many, many more programs at various levels of government. These entities have a large investment in their digital stations. Such an action would directly attack two of the Commission's purposes for the amateur radio service: “to expand the existing reservoir of trained operators,” (in fact it would \textit{shrink} the reservoir), and “...to enhance the value of the service, particularly with respect to emergency communications.” (§ 97.1(b) and (d))

Emissions using advanced digital techniques are difficult, but not impossible to intercept for a knowledgeable, resourceful and skilled developer. As these techniques evolve to be more sophisticated and efficient, they also become more challenging to monitor, especially for a layman. This has been the trend with all ARC (or connected) digital communications over time. As amateurs continue to contribute to the radio art, it is reasonable to expect the trend to continue. To guard the potential for abuse and threats to the nation, the Commission already has safeguards in place (§ 97.305(b)(3) for example). In electronic systems like Winlink near-real-time monitoring can take place off-the-air more effectively, for both discovery and enforcement. Rappaport and his supporters demand the on-air kind of monitoring of content that was sufficient for analog and simple digital modes of the past. They are not sufficient for the future. To the Commission's credit, they have already accommodated the need.

In our attachment we show that within a system like Winlink, our numerous, interested and knowledgeable participants—with the help of smart automation—are doing a better job of monitoring and inspecting hard-to-intercept transmissions than if less knowledgeable operators participated on-air. Over 2500 active, experienced and licensed Winlink sysops inspect their station's daily traffic, and they outnumber the ARRL's volunteer monitors plus they exclusively focus upon the digital band segments we use. Further, administrators and sysops employ powerful tools to search and sort thousands of messages for inspection. All communications are logged in detail and messages are archived, and available to the FCC and anyone else on request. Similar logging and archiving are generally employed by other digital systems we're aware of.

It should be noted that within Winlink, station IDs, message and transaction information are always sent in clear text and can be intercepted easily by laymen on-air using the same equipment and software the sender and receiver use.
Theodore Rappaport and the opponents he informs offer an emotional, layman's conjecture in their assertions that hard-to-monitor, advanced digital protocols used in the amateur radio service will encourage crime, terrorism, and are a threat to national security. They clearly do not know or appreciate what monitoring and inspection routinely occurs, and are thus not qualified to judge. Rappaport himself has never held a Winlink account or ever used one to learn, or rationally evaluate it. He has never participated in the monitoring of Winlink messages. The same is true for almost all the commenters he has inspired.

Rappaport is the source for many distortions of fact on the record. Our attachment also responds to the most egregious untruths. We urge you to study them. These distortions are repeated across the proceeding's comments and should be disregarded and not allowed to color a rational decision-making process on Docket No. 16-239.

The ARSFI board of Directors unanimously support the Commission's proposal in Docket No. 16-239. Our comments to this effect are summarized with support in the attached document.

I and the entire Board remain at your service should any questions arise.

Sincerely,

Loring A. Kutchins, W3QA
President
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Attachments:
Comments in Support and Rebuttal of Opponent's Arguments by the Board of Directors of the Amateur Radio Safety Foundation, Inc. (ARSFI_Comments.pdf)
Letter from Theodore Rappaport to Chairman Ajit Pai, November 15, 2018 (Rappaport1.pdf)
Letter from Theodore Rappaport to the Commissioners, November 10, 2018 (Rappaport2.pdf)

ECFS – Docket No. 16-239, 17-344, RM-11708, RM-11759