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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

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RM-8218  
FCC MAIL BRANCH

In the Matter of

Revision of Part 97 of the Rules  
Governing the Amateur Radio  
Services Concerning High-Frequency  
Data Communications

To: The Commission

COMMENTS TO PETITION FOR RULE MAKING

COMES NOW Jay W. Townsend, a lawful resident and citizen of the state of Washington and of the United States of America and interested party, and files these comments on the subject Petition for Rule Making and states as follows:

I. INTRODUCTION

1. Having first been licensed as an Amateur in the Amateur Radio Service by the Commission in 1967, am presently the holder of a license granting Amateur Extra class privileges.
2. I am very active as an operator on the amateur bands utilizing all modes of operation and specializing in digital communications. I am active in the Military Amateur Radio Service (MARS) as a traffic handler. I operate my station, 24 hours per day using an unattended digital mode (packet) on VHF frequencies.
3. I currently serve on the Amateur Radio Digital Committee, a national committee formed in 1990 to represent views of amateurs across the nation on digital matters.

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4. As an amateur operator, I am a member of the following digital clubs, associations, and societies: Eastern Washington Amateur Radio Group, a ARRL affiliated digital club; International RTTY DX Association; and The American Digital Radio Society. I am also a columnist for the national digital magazine, RTTY Journal and receive many comments, suggestions, and ideas from readers and operators of the digital bands.

5. I am active in international amateur activities as well. I have held licenses from Ecuador and the Galapagos Islands. I have handled and frequently receive third-party traffic handled via digital amateur means. Most of this activity takes place in the frequency bands currently subject of this petition. I also was a pioneering member of the U.S. Air Force Mars continental Packet Traffic System, which is an automatically-run traffic system.

6. Digital radio sporting contests are another main activity, and I am the current world record holder in several international amateur events. I hold the all-time international record, as a single operator, for the number of contacts made while using digital radio (RTTY) in a amateur radio contest.

7. Professionally, I am the Director of Micro Computers for a major company, the network administrator, communications specialist and an experienced computer programmer.

8. Consequently, I possess first-hand knowledge and experience relative to the matter now before the Commission and respectfully request that my comments be given due consideration.

## II. SUMMARY

Before you is a petition filed by The American Radio Relay League, Incorporated, on February 1, 1993 requesting changes in the rules in Part 97 of the Commission's Rules governing the Amateur Radio Services (47 C.F.R. Section 97.1 et seq.) to allow amateur stations to be operated under automatic control in various parts of the HF spectrum. This petition (RM 8212) upon examination is well prepared and does in certain aspects, meet many of the criteria which are important to the digital community. Unlike its predecessors RM 7248, RM 7681, and others it does not contain as many limitations and problems. For example, channelization, mode restriction, and control of specific HF frequencies.

It is this amateur's opinion that the Petition for Rule Making by the ARRL is not in the best interest of the Amateur Radio Service or of the government as presented.

The specific problems of the petition are three. (1) It does not encourage the use of new technologies within the Amateur Radio Service. It is unduly restrictive and does not facilitate and encourage technical innovation. (2) It does not minimize interference and does not encourage using the minimum power that is necessary to communicate. (4) It creates a sub-band by

## COMMENTS

1. The petition as filed raises several complicated and complex issues. Technical innovation is not encouraged by this petition. It does not address intelligent data coding, improved modulation schemes, forward error correcting, data compression or many other state of the art techniques.
2. It does not address interference problems of others operators using the same frequency's for other uses. Using the minimum power necessary to communicate is not discussed in any detail.
3. With one exception, I find no specific problem with the proposed sub-bands chosen and the arguments given by the petitioner. However, the need for codification by law of these frequencies has not been explained to my satisfaction. It would be my opinion that you will see several other petitions on this subject, and that each will seek specific sub-bands or the total use of the digital spectrum. The last several years have aptly demonstrated to me that it is highly unlikely that we can legislate, codify, and present changes to sub-bands as fast as the technology changes. In this world in which we live technology changes at least every eighteen months and what was new is now old. Just since the start of these various petitions RM 7248 thru RM 8218 we have seen entire new modes in the digital world.
  - a. We need to allow full flexibility to allow experimentation and new techniques to be developed in digital communications.

b. Automatic control has not caused any problems on VHF nor has the HF STA shown any measurable problems of control of third party traffic or other enforcement limitations. There is no reason to suspect that any problems will ever arise.

c. The five year long STA had little impact in formulating feasibility studies for fully automatic operation. The STA demonstrated only that HF Packet in a fully automatic form is able to pass traffic. As far as the evidence that has been presented by the ARRL, the STA was not a group of experimenters, but rather, a group of traffic handlers.

d. Comments by the ARRL that the rule-imposed specific choice of sub-bands in their earlier petition resulted in their decision to withdraw the petition is faulty. What many of those who filed comments were opposed to was the channelization of HF spectrum.

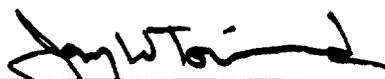
e. Sub-bands by function which are rule-imposed are not the tradition of the Amateur Radio Service. We do not have single sideband HF traffic frequencies, slow-scan Television frequency's, contest frequency's, DX frequency's, or discussion frequency's. The Amateur Service has un-regulated gentleman's band plans which work and create no need for governmental intervention.

#### IV CONCLUSIONS

In summary, I suggest the following:

1. The Amateur Radio Service needs automatic control, and it needs semi-automatic control as well as keyboard to keyboard control. It is in the best interests to provide this through permitting fully automatic control as well as semi-automatic control in all parts of the digital spectrum.
2. Both Automatic Controlled Stations and Stations in Semi-automatic status should have a power limitation of 100 watts so as to prevent interference to stations not using such control and to utilize those frequencies best which result in the most traffic flow.
3. Limitations as to specific codes, compression techniques, modulations schemes, error correction and control ideas should be fully expanded and allowed so as to permit the Amateur Radio Service the capability to grow with and expand the technology of the United States. It is respectfully requested that the Commission consider the comments and recommendations made herein and incorporate them into any final Notice of Proposed Rule Making.

Respectively submitted,

  
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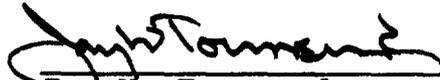
May 13, 1993

CERTIFICATE OF SERVICE

I hereby certify this 13th day of May, 1993, that copies of this reply were served upon the petitioners by U.S. mail postage prepaid.

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