

NOV 23 1993

Ted W. Colby, Jr., WØRA

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

November 15, 1993

Mr. Ralph Haller, Chief  
Private Radio Branch  
Federal Communications Commission, 2025M  
Room 5002  
Washington, D.C. 20554

Reference: ~~RM-8218~~  
HF Digital Auto-Forwarding  
Deletion of Proposed Subbands

Dear Mr. Haller:

As stated in my handwritten note on the above subject dated May 14, 1993, I am opposed to the subbands in ARRL's petition (RM-8218) dated February 1, 1993.

Opposition to the subband portion of RM-8218 is also expressed in the enclosed Petitions containing the signatures of Radio Amateurs who either utilize or benefit from HF Digital operations.

The basis of our opposition to restrictive subbands for HF auto-forwarding is fully described in the attachment to this letter.

It is our conviction that the digital subbands for HF forwarding advanced by ARRL will solve no documented interference problem, are not representative of the views of the majority of Radio Amateurs who utilize or benefit from HF digital operations and are not consistent with FCC's self policing objectives for the Amateur Radio Service.

As an Alternative, I suggest that FCC utilize my proposal dated August 20, 1992 to formulate its Rule Making for HF auto-forwarding.

Sincerely,

*Ted W. Colby*  
Ted W. Colby, WØRA

Enclosures: Signed Petitions  
Basis and Description of Opposition to Subbands

cc: ARRL, Mr. George S. Wilson, W4OYT  
Mr. David Sumner, K1ZZ  
Mr. Marshall Quiat, AGØX

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**OPPOSITION TO THE RESTRICTIVE SUBBANDS IN RM-8218**

**INTRODUCTION**

A number of Radio Amateurs have joined together in this petition to register their opposition to the subband portion of ARRL's proposal for HF Auto-forwarding, RM-8218.

HF digital operators are, in the main, a technically advanced, mature and responsible segment of the Amateur Radio community and have achieved an exemplary record of Public Service and Spectrum Conservation.

The enclosed petitions underscore the widespread belief that the digital modes are enjoying an explosive growth within the Amateur Radio community and that restrictive subbands will, among other things, inhibit that growth.

By "gentleman's agreement", HF digital operators have managed their operations within recommended HF band plans and have produced no known or documented interference to other Amateur Radio operations.

As demonstrated by their excellent record of self policing, HF digital operators have earned the right to continue to "self police" their small portion of the HF spectrum and avoid the excessive and unjustified cost to enforce restrictive subbands.

**I. RESTRICTIVE SUBBANDS WILL INHIBIT GROWTH**

HF auto-forwarding is currently practiced in small segments within the 3.5 Mhz. to 29.7 Mhz. Amateur Bands.

One of the largest segments within these frequencies, the 20 meter band segment, has unattended digital forwarding in only 20 Khz of this 350 Khz band.

The dominant mode choice of operators who employ HF auto-forwarding is the "Packet" mode which utilizes the AX.25 digital communications protocol.

The "packet" mode is the "mode of choice" because of its high speed, averaging 60 bytes per second in the compressed data format, and because of its ability to accommodate up to 10-12 stations simultaneously on the same frequency with minimal loss of throughput.

Even with these impressive characteristics, high throughput and maximum spectrum utilization, most of the current band segments where HF auto-forwarding is practiced are quite busy.

As new stations desire to come on board to practice HF auto-forwarding, they may find it impossible to participate in the growth of the resource simply because there is not enough room within the proposed subbands to accomodate them.

As Amateur Radio history bears out, with "gentleman's agreements" we can modify our band plans to provide more digital allocation for HF auto-forwarding and thereby "grow the resource", permitting newcomers to practice HF auto-forwarding.

On the other hand if we are squeezed, BY LAW into restrictive subbands which, as proposed, are even smaller than our currently existing HF auto-forwarding segments, we will indeed INHIBIT THE GROWTH of the Digital forwarding resource that serves a large segment of the Amateur Radio Community and the Public at large.

## II. RESTRICTIVE SUBBANDS WILL INCREASE THE COST OF REGULATION

Picture an FCC monitoring crew whose objective is to determine if a digital HF BBS to HF BBS link is attended or unattended and if unattended, is operating outside the proposed digital subbands.

In order to prove any presumption of a violation of the proposed subbands, FCC monitoring personnel MUST be physically present at both ends of an ACTIVE HF BBS to HF BBS link in order to establish that the link is either unattended or attended.

The expense to the taxpayers to have two crews, or in many cases multiple crews, physically present to prove a subband violation simply because digital stations within the link are presumed to be unattended, is ludicrous in the extreme.

By ARRL admission, there is no documented proof of interference to Amateur Radio operations on adjacent frequencies from digital HF auto-forwarding.

Based on this fact, there is absolutely no justification for the excessive and inordinate expenditure of taxpayer dollars to monitor presumed subband violations due to the suspected existence of unattended digital HF operations outside the proposed subbands.

## III. RESTRICTIVE SUBBANDS CURE NO KNOWN OR DOCUMENTED INTERFERENCE PROBLEM.

ARRL frankly admits that there are no documented cases of interference from HF auto-forwarding. ARRL believes, however, that if HF auto-forwarding is expanded to permit unattended HF stations to operate anywhere within the approved HF digital band segments that these stations are certain to cause interference to AMTOR and

This is a classic "red herring" assertion. ARRL is proposing to fix something that isn't broken. My conviction and that of my colleagues is, "IF IT AIN'T BROKE, DON'T FIX IT". The track record of unattended HF digital forwarding operations to date certifies that the HF auto-forwarding system is not broken.

By comparison, VHF and UHF unattended digital stations have been permitted for years to operate on any VHF or UHF frequency where the digital modes are legal. "By gentlemen's agreement" these operations continue to be carried out in an orderly fashion with a great deal of consideration for digital keyboard operators on adjacent frequencies.

The track record for unattended digital operations, on the UHF/VHF frequencies cited above, is the pattern by which HF digital band plans were conceived and implemented. It further sets the trend by which HF operations are most likely to be conducted in the future.

There is no basis, therefore, to presume that a threat to adjacent HF operations WILL DEVELOP from HF auto-forwarding, when in fact no adverse effect from unattended HF digital operations has yet been experienced, nor is such a threat implied by the successful VHF/UHF digital operations pattern cited above.

#### **IV. RESTRICTIVE SUBBANDS ARE INCONSISTENT WITH FCC'S OBJECTIVE OF SELF POLICING IN THE AMATEUR RADIO SERVICE.**

It is an established fact that BUDGET RESTRAINTS LIMIT THE COMMISSION'S ENFORCEMENT EFFORT.

The following excerpt from QST, October, 1993, page 83 makes this point abundantly clear.

[excerpted comments from Mr. Robert McKinney, Engineer-in-Charge at FCC's Vero Beach, Florida office.]

"It is widely known that budget restraints limit the Commission's enforcement efforts; but blatant, repeated violations such as these (referring to the malicious interference investigation of William Irwin, K3CQR) will not be tolerated or go unpunished."

Mr. McKinney also said that, "It should be pointed out that a considerable number of concerned amateurs cooperated in the investigation. We appreciate the efforts of these amateurs as a community willing to take responsibility for being self-policing."

Adding a significant layer of FCC enforcement in order to police digital subband violations is contrary to the FCC objective that the Amateur Radio Service be increasingly self policing, as the above excerpt from QST confirms. Further, it is contrary to the objectives of the Amateur Radio Community which has clearly demonstrated its worthiness to police itself.

Volunteer Examinations, Call Sign Administration and other areas of previous FCC activity have been or will soon be placed in the hands of responsible Amateur Radio groups.

Let's keep the spirit and practice of self policing alive by allowing HF digital operations, both attended and unattended, to proceed WITHOUT RESTRICTIVE SUBBANDS and the necessary FCC enforcement costs that monitoring the subbands would require.

### SUMMARY AND CONCLUSIONS

Restrictive subbands have no justification in the progression of HF digital operations from a Special Temporary Authority (STA) status to permanent rules for unattended HF auto-forwarding.

Restrictive Subbands for digital Hf auto-forwarding have no more validity than Restrictive Subbands would have for Slow Scan Television on the HF bands.

These special interest activities have flourished for years within guidelines and gentleman's agreements and should continue to be regulated by the Amateur Radio Community in this same manner.

In Summary, Restrictive subbands would:

- 1) Inhibit the Growth of the Digital modes.
- 2) Increase the Cost of Regulation
- 3) Solve no known or documented Interference Problem
- 4) Conflict with FCC Objectives for Amateurs to be "Self Policing".

**PLEASE DELETE THE SUBBANDS FROM RM-8218!!**

## PETITION

Whereas, the use of Digital modes is the fastest growing activity in Amateur Radio, and

Whereas, to promote further growth in the digital modes, ARRL has petitioned FCC (RM-8218) to permit Automatic Digital Operations from 3.5 to 29.7 Mhz. and,

Whereas, the ARRL petition requests that these automatic operations be confined to the specific sub-bands listed below: and,

3.620-3.635 MHz.  
7.100-7.105 MHz.  
10.140-10.150 MHz.  
14.095-14.0995 MHz.  
14.1005-14.112 MHz.  
18.105-18.110 MHz.  
21.090-21.100 MHz.  
24.925-24.930 MHz.  
28.120-28.189 MHz.

Whereas, the specific sub-bands will inhibit the desired growth of Digital modes, significantly increase the cost of regulation, and cure no known or documented interference problem,

In view of the foregoing, I, WE the undersigned request by this petition that FCC delete the sub-band portion from RM-8218.

<u>Ted W. Colby</u>	<u>WØRA</u>	<u>9/29/93</u>
Name	Call sign	Date
<u>2 H. Sims</u>	<u>WB6YXD</u>	<u>9/24/93</u>
Name	Call sign	Date
<u>James Potts</u>	<u>NØWGA</u>	<u>9/29/93</u>
Name	Call sign	Date
<u>R. Bruce Boulton</u>	<u>WD5HMS</u>	<u>10/02/93</u>
Name	Call sign	Date
<u>Jay H. Matthews</u>	<u>NØVAO</u>	<u>10/15/93</u>
Name	Call sign	Date
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<u>Everett E. Withing Jr</u> Name	<u>WQ7VNF</u> Call sign	<u>10/07/93</u> Date
<u>John S. Otis</u> Name	<u>NØNKR</u> Call sign	<u>10/08/93</u> Date
_____ Name	_____ Call sign	_____ Date



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<u>William H. King</u>	<u>WØLKD</u>	<u>10-07-93</u>
Name	Call sign	Date
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<del>Ted W. Colby</del>	<del>W6EA</del>	<del>10/6/93</del>	DUPLICATE TUE 11/10/93
Name	Call sign	Date	
Edward B Wright	W6LJF	10/6/93	
Name	Call sign	Date	
Susan K. Wright	NØEAD	10/6/93	
Name	Call sign	Date	
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<u><i>Gary Lornial</i></u>	<u>N8GTC</u>	<u>10-15-93</u>
Name	Call sign	Date
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<u>Skee Hipszky</u>	<u>NØPRY</u>	<u>10-19-93</u>
Name	Call sign	Date
<u>Virginia Hipszky</u>	<u>NØVDD</u>	<u>10-19-93</u>
Name	Call sign	Date
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<u>Jack U Harrison</u>	<u>W7JHX</u>	<u>10/15/93</u>
Name	Call sign	Date
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<u>Andrew R. [Signature]</u>	<u>W7GCI</u>	<u>Oct 31, 1993</u>
Name	Call sign	Date
<u>Frank A. Johnson</u>	<u>K6TWF</u>	<u>OCT 31, 1993</u>
Name	Call sign	Date
<u>George R. Abbott</u>	<u>WA1BHH</u>	<u>OCT 31, 1993</u>
Name	Call sign	Date
<u>[Signature]</u>	<u>KB7CAN</u>	<u>OCT 31 1993</u>
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<u>Jimmy G. Fisher</u>	<u>KD30</u>	<u>10-31-93</u>
Name	Call sign	Date
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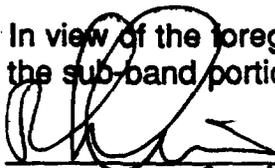
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 Name <u>RICHARD BARRY ULRICH</u>	<u>KB6RAA</u> Call sign	<u>11/1/93</u> Date
_____ Name	_____ Call sign	_____ Date