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September 5, 2001

Ms. Magalie Salas, Secretary  
Federal Communications Commission  
445 12th Street SW  
Washington DC 20554

**Re: RM-10165, Amendment of Parts 2 and 97 of the Commission's Rules  
Regarding the 2300-2305 MHz Band**

**RM-10166, Co-Primary Allocation of 2300-2305 MHz to the Amateur Radio  
Service and the Miscellaneous Wireless Communications**

***Ex parte Communication***

Dear Ms. Salas:

Pursuant to Section 1.1206(b)(1) of the Commission's Rules, I am electronically filing this written *ex parte* communication for inclusion in the above-referenced dockets.

Attached is a letter from Rick Fleeter, President of AeroAstro, to the editor of the magazine QST, published by ARRL.

I asked Dr. Fleeter's permission to enter this letter in the docket because it may be of interest to Commission staff and the other parties to these proceedings. The letter eloquently sums up AeroAstro's position with respect to the Amateur radio community.

If there are any questions about this filing, please call me at the number above.

Respectfully submitted,

Mitchell Lazarus  
Counsel for AeroAstro, Inc.

cc: Service List

August 30, 2001

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To the Editor, QST

I owe more to amateur radio and ARRL than just 40 years of fascination, enjoyment and education. Through Amsat I had the opportunity to compare my work in large spacecraft with the amateur practices in microsattellites. This eventually led me to leave my aerospace job and make a career out of my hobby by founding AeroAstro, a leading developer of small and low cost satellites for communications, science, education and defense.

But my small efforts to advance microspace, and promote its use in ham radio, has not been without conflicts. I now realize that some conflict is necessary to grow and to change in any technology area, satellites and ham radio included. I am writing in hopes that one of these conflicts, between AeroAstro's proposed use of 5 MHz of spectrum, and ARRL's position on those 5 MHz, can be assuaged by the addition of some information. I believe that we have an opportunity to benefit ham radio in cooperation, rather than conflict, between commercial and amateur use of this spectrum.

AeroAstro has proposed that Amateur Radio and our service share co-primary status in the 2300 to 2305 frequency band. This proposal has been viewed by ARRL as just one more encroachment on ham bands, and opposed on that basis. But I believe this is a misunderstanding of the situation and our proposal. In fact, many of the employees of AeroAstro got their start in ham radio, and none of us would advocate any action that would weaken our hobby. On the contrary, AeroAstro's proposal was designed to strengthen ham radio.

Amateur use of the 2300 - 2305 MHz spectrum is currently only permitted on a secondary basis. This means that if FCC awards a primary allocation to a company, hams would have the onus to ensure no interference with that service, or be shut down. When hams first got this allocation, S-band spectrum was exotic and largely unused. It now lies in the middle of the action - and the frequency of attempts to gain primary status that would eclipse the ham service is increasing. Eventually, someone will succeed.

AeroAstro proposed a co-primary status with amateur radio. We have developed a sensor readout system using very wide band spread spectrum modulation of a very narrow band, low power signal transmitted from the ground. This approach would co-exist quite comfortably with amateur operations in the same band. By elevating amateurs to co-primary status, our proposal ensures that ham operations can not be shut down by any other spectrum usage. This enhances the future of our precious spectrum.

The FCC has changed, and amateurs need to work with newer philosophies. In the days when there was enough to go around, spectrum was usually allocated exclusively. But today, with shortages worsening, the FCC looks most favorably upon proposals that share spectrum, and that maximize its use. The FCC is increasingly reluctant to provide exclusive allocations to particular services.

Amateurs would be wise to seek opportunities, like the one we have created. In this way we strengthen our position on spectrum not by circling the wagons against any non-amateur use, but rather by showing a willingness to cooperate to keep spectrum available for hams, while at the same time maximizing utilization of our precious and finite resource.

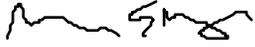
I was sorry to see that ARRL has not yet adapted to this more cooperative, win/win model, and has chosen rather to promote its exclusive interests, portraying us as predators. This is inaccurate and does not serve the future of our hobby.

Our proposal has also been criticized for suggesting limits on ham radio emissions - power and antenna beam width. We did not invent these restrictions - we merely restated them from documents ARRL had filed with the FCC. These restrictions were created by ARRL to ensure hams don't interfere with very low level signal work in adjacent bands - specifically the JPL Deep Space Network. What is necessary to keep from interfering with them also makes our application and the ham application virtually guaranteed to not interfere with one another.

In effect our proposal creates a workable sharing among commercial, amateur and scientific uses of spectrum. I believe ARRL's support of this pioneering cooperation will demonstrate to the FCC that ARRL intends to strengthen ham radio through a modernized approach to spectrum management, while supporting the FCC's desire to accommodate the ever growing and diversifying demand for spectrum.

While it's true that pressure on spectrum continues to increase, hams should not assume this means we need to become more and more vociferous in defense of our spectrum. Because at the same time, new technologies and new policies are opening up opportunities to expand our range of operations. I hope ARRL will

join us in building this new paradigm and thereby ensuring the future of our spectrum and the amateur radio community that relies upon it.

A handwritten signature in black ink, appearing to read 'Rick Fleeter'.

Sincerely,  
Dr. Rick Fleeter, K8VK  
President, AeroAstro Inc.

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