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WRITER'S DIRECT DIAL

March 28, 2001

Magalie Roman Salas, Secretary  
Federal Communications Commission  
445 12th Street, SW, Room TW-A 325  
Washington, DC 20554

Re: ET Docket No. 00-221  
Notice of Oral *Ex Parte* Communication

Dear Secretary Salas:

On March 27, 2001, ArrayComm Inc. (hereinafter ArrayComm), through its representatives, Bradley Holmes, Marc Goldberg and Leonard Kolsky, met with members of the Office of Engineering and Technology (OET) and the Wireless Bureau (WB) of the Commission regarding the above-referenced proceeding. Lisa Gaisford and Tom Derenge represented OET; Ramona Melson, John Schauble and Nese Guendelsberger attended for WB.

ArrayComm presented a summary of its Comments in this Docket. We described the initiatives that ArrayComm had taken to assure that its operations at 1670-1675 MHz would not cause interference to relevant United States Government facilities operating adjacent to or co-channel with its proposed i-BURST system.

We sought the Commission's advice as to whether there were issues that ought to be addressed in Reply Comments, due April 9, 2001. We also stressed the need for a cooperative FCC-National Telecommunications and Information Administration (NTIA) initiative to develop a meaningful database of existing users so that appropriate coordination can be effected.

Finally, we asked about auction schedules; i.e., how long the process of adoption of service rules, auction rules and the actual conduct of an auction might take.

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Magalie Roman Salas, Secretary  
Federal Communications Commission  
March 28, 2001  
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Pursuant to Section 1.206(b) of the Commission's Rules and Regulations, 47 C.F.R., § 1.206(b), two copies of this Notice and the summary referred to above are included.

Respectfully submitted,



Leonard S. Kolsky  
Counsel for ArrayComm

LSK/dlb

Enclosures

cc: Lisa Gaisford, OET  
Thomas Derenge, OET  
Ramona Melson, OET  
John Schauble, WB  
Nese Guendelsberger, WB



19 March 2001

**To:** US Government Scientific and Meteorological Users In and Adjacent to 1670-1675 MHz

**Subject:** FCC ET-Docket No. 00-221, 1670-1675 MHz

**From:** Marc Goldberg  
CTO, Internet Products Group  
ArrayComm, Inc.  
2480 North 1<sup>st</sup> Street, Suite 200  
San Jose, CA 95131  
408.952.1810  
marcg@arraycomm.com

Gentlemen,

Thank you for your cooperation and openness in our discussions of coordination and protection issues relating to the 1670-1675 MHz band. The information that you provided to us (via John Kirby of WFI, in some cases) was central the development of our comments in ET-Docket 00-221. Our comments were filed on 9 March 2001.

Reply comments for the docket are due on 9 April 2001, which is why we are circulating this memorandum. We want to be sure that you are aware of the proposals that we are making for the protection of co- and adjacent-channel meteorological and astronomical services. We are also very interested in any comments or suggestions that you might have regarding those proposals. We will do our best to address each of them in our reply comments.

A copy of our 9 March 2001 filing is attached. In summary, we are proposing the following for the protection of co- and adjacent-channel services.

1. Meteorological satellite earthstations, radiosonde receiver sites and radio telescopes are to be protected using a criterion of power spectral flux density (PSFD) as measured at the those sites.
2. The threshold (maximum) PSFD levels are to be those provided to us by you. Namely, ITU-R RA.769-1 Tables 1 and 4 (for non-VLBI and VLBI measurements, respectively) for radio astronomy sites, and the relevant portions of Appendix C of NTIA Special Publication 95-32, "Spectrum Reallocation Final Report", for radiosondes and GOES I through M earthstations.
3. Protection is to be accomplished through a joint planning and coordination process including measurements made at your sites to insure that the thresholds are met.

Three other aspects of our comments that are particularly relevant are as follows.



ARRAYCOMM

1. We have engineered our equipment, base station and user terminal transmit filters in particular, specifically to provide protection for your services.
2. The adaptive antenna technology employed in our base stations results in an order of magnitude improvement in the ratio of radiated out-of-band emissions to in-band EIRP as compared to other technologies. The directive nature of adaptive antenna transmissions are also advantageous for the protection of co-channel services.
3. Although the user terminals in our system are portable, they adhere to a “listen before talk” regimen which means that we can control not only emissions from our base stations in the vicinity of your sites, but also emissions from our user terminals in those same areas. A deployment of base stations that protects your sites on a PSFD basis not provide demodulable signals in the vicinities of your sites, and hence the user terminals will not transmit there.

Coordination issues relevant to all of your systems are addressed in Sections IV, V.D, V.E and Appendix C, Sections 1 through 3, of the attached filing. Sections V.B and V.C are specific to radiosondes and meteorological satellite earth stations. Section V.A and Appendix C, Sections 4 and 5, are specific to radio astronomy.

As you will see from the discussion in Section V.E, one of the more challenging aspects of coordination in this band will be the creation of a definitive list of protected sites: there is no one agency responsible for all of the co- and adjacent-channel operations and, in some cases, there appears to be no responsible agency. Nonetheless, we believe that such a list is necessary. It will ensure that all sites are afforded appropriate protection. It will also enable a prospective operator to properly assess the value of this spectrum. Our suggestion is that NTIA and FCC jointly create and maintain this list, working with the appropriate agencies, ArrayComm and any other interested parties. We would be particularly interested in comments or alternatives that you might propose here.

We look forward to your responses, and would be appreciative if you provide them by 28 March so that we have adequate time to address them in our reply comments. Thank you for your assistance.