

Before ~~the~~
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Clarity Media Systems, LLC	)	0692-EX-PL-2007
Application for Experimental License	)	

To: Office of Engineering and Technology
Experimental Licensing Branch

PETITION TO DENY

The Association for Maximum Service Television, Inc. ("**MSTV**")¹ respectfully requests that the FCC deny the application of Clarity Media Systems, LLC ("Clarity") for an experimental license. Clarity's application is an attempt to revive the multiple Part 78 waiver requests that the Media Bureau appropriately denied last **year**.² For a number of legal and technical reasons, the Media Bureau determined that Clarity's operation of a nationwide wireless cable service using 2 GHz **spectrum** would not be in the public interest. In light of the Media Bureau's decision, the proposed experiment cannot result in a viable technology and would therefore be **unwarranted**. Moreover, grant of this application would be detrimental to the public interest because of interference to critical electronic newsgathering ("**ENG**") services. The Office of Engineering and Technology ("**OET**") therefore should dismiss Clarity's application.

¹ MSTV is a nonprofit trade association of local broadcast television stations committed to achieving and maintaining the highest technical quality for the local broadcast system.

² See *Waiver Requests By Clarity Media Systems, LLC To Operate CARS Stations At Flying J Travel Plazas*, Order, DA 07-1946, 22 FCC Rcd 8382 (May 3, 2007) ("Denial Order"). Clarity has filed an Application for Review ("AFR") of the Media Bureau's decision. See Attachment A for a list of the rules that Clarity would violate.

I. CLARITY'S EXPERIMENTAL LICENSE REQUEST IS A TRANSPARENT ATTEMPT TO MAKE: AN END-RUN ON THE MEDIA BUREAU'S WAIVER DECISION.

Clarity's request for **an** experimental license is an attempt to resurrect a business plan, using the ENG frequencies, that the Media Bureau has already determined is contrary to the public interest. Thus, Clarity's application does not meet the Commission's requirement that “[e]ach applicant for an authorization in the Experimental Radio Service must enclose with the application a narrative statement describing in detail ... how the program of experimentation has a reasonable promise of contribution to the development, extension, or expansion, or utilization of the radio art, or is along lines not already **investigated**.”³

Clarity seeks to operate a nationwide wireless cable service in the 2 **GHz** space, in spectrum shared by broadcasters to provide ENG services. ENG services are critical in bringing live, on-the-scene coverage of emergency situations and other breaking news coverage to the viewing public. In the Denial Order, the Media Bureau denied Clarity's 258 applications and related waiver requests to operate a wireless cable service under the guise of a cable television relay service ("CARS") license.

Clarity's proposed experiment would be fruitless, as Clarity cannot legally resurrect its business plan. One of the reasons for the Denial Order was the interference Clarity's operations would cause to the public's service rendered by broadcasters' ENG operations, as well as by others (*e.g.*, NASA). Clarity has failed to address these technical concerns (see Part **II**, below). But the Media Bureau's decision was not limited to considerations of interference. The Bureau also noted that Clarity had other alternatives to the 2 **GHz spectrum**. It stated that

³ 47 C.F.R. § 5.63(a) (emphasis added).

“[a]mong other alternatives, Clarity could purchase spectrum at auction, pursue using unlicensed spectrum, install cable at its truck stops, or negotiate spectrum **leases**.”⁴ Because Clarity is ineligible for the waivers of the eleven Part 78 rules that would be necessary to create a wireless cable system in the 2 **GHz** spectrum, the proposed experiment does not have a "reasonable promise" of contributing to a legally viable service. OET should not allow Clarity a second bite at the apple. At the very least, OET should not even consider granting the experimental application unless and until the Commission acts favorably on Clarity's Application for **Review**.⁵

If OET decides to grant Clarity's application for an experimental license, then **MSTV** respectfully requests that the license contain a condition requiring Clarity to test the use of other spectrum alternatives. These alternatives include the 5 **GHz** unlicensed spectrum, the 3.6 **GHz** nonexclusive bands, the 700 **MHz** spectrum (the recent auction of which Clarity and its enormous parent company, Flying J **Inc.**,⁶ apparently decided to ignore), and the 1.7/2.1 **GHz** and 2.5 **GHz** licensed bands (including leased access from **BRS/EBS** licensees). Clarity has failed to seriously explore these **options**.⁷

⁴ Denial Order at para. 15.

⁵ Moreover, while Clarity states that the Commission may need more information, its experimental application is fatally flawed from the outset and could not provide **useful** data. For example, the experiment would apply a flawed, inapplicable interference standard. The technical problems with Clarity's application are described in greater detail below and in the attached Engineering Statement.

⁶ Flying J, the ultimate parent company of Clarity, owns the truck stops at which Clarity proposes to provide its wireless cable service. "Flying J's sales for the fiscal year ended January 31, 2006, were approximately \$10 billion, making it one of the largest private U.S. companies." **See** Exhibit 1 to Clarity's lead waiver application ("Clarity Application") at 8.

⁷ **See** Letter from Matthew S. **DelNero** to Marlene **H. Dortch**, Re: Request to Uphold Denial of 257 Applications and Related Waiver Requests of Clarity Media Systems, LLC (**DA** 07-1946) (Aug. 23, 2007); **see** also Letter from Matthew S. **DelNero** to Marlene **H. Dortch**, Re: Denial of 257 Applications for **CARS** Licenses and Related Waiver Requests of Clarity Media Systems, LLC (**DA** 07-1946) (**Oct. 9, 2007**).

II. THE EXPERIMENT FAILS TO REMEDY THE RISK OF INTERFERENCE.

In the Denial Order, the Media Bureau also expressed its concern that Clarity's system would cause harmful interference to **BAS/ENG** operations, as well as interference to the other co-primary users of the spectrum (NASA and CARS licensees).⁸ Clarity's proposed experiment does not remedy these interference concerns. Given the risk to critical ENG operations, grant of the application would not be in the public interest.

As described in the Engineering Statement attached hereto as Attachment B, Clarity's proposed experiment is deeply flawed. First, Clarity fails to apply the correct interference standard. Clarity has not justified its proposed departure from the TSB-10-F **standard**,⁹ which is the industry standard reference for determining potential microwave interference, and which specifies methods for calculating digital-into-digital and digital-into-analog (**FM**) interference. Clarity states that "both Clarity and the broadcast community agree that 8 dB is the minimum **D/U** value for digital ENG **systems**."¹⁰ MSTV has clearly and consistently demonstrated that TSB-10-F is the applicable interference standard.¹¹ An 8 dB **D/U** interference standard does not account for the de-rating of receive equipment and thus is an inappropriately lax standard. Given the critical importance of the public's ENG service, adherence to the more stringent threshold interference standard of TSB-10-F standard is warranted.

⁸ See Denial Order at paras. 10-12.

⁹ See Telecommunication Systems Bulletin TSB-10-F, "Interference Criteria for Microwave Systems," Telecommunication Industry Association (adopted May 31, 1994).

¹⁰ See Exhibit 1 to FCC Form 442,0692-EX-PL-2007, at 4.

¹¹ See MSTV Presentation in DA 07-1946 (November 8, 2007), at 6-7. As the sensitivity of ENG reception equipment increases with new receiver designs, they will be more susceptible to threshold interference. See also Attachment **B** at 1-2.

Second, Clarity has not provided **sufficient** information regarding its proposed directional antenna system. Clarity is proposing an extreme amount of down-tilt (four degrees of electrical down-tilt and 30 degrees of mechanical down-tilt). Neither **MSTV** nor anybody else can calculate the undesired signal for all directions unless Clarity provides more information with respect to the proposed elevation pattern and the proposed azimuth **pattern**.¹²

Third, Clarity ultimately is proposing only a modest reduction in power. Reducing transmitter output power **from** 200 **mW** to 50 **mW** per 6 **MHz** channel "would still create significant areas of impaired operation for BAS **services**."¹³ In light of the predicted interference to **ENG** operations, this experiment would not be in the public interest.

* * *

Clarity has not met its burden to justify an experimental license. The experiment cannot result in a viable service in the 2 GHz spectrum. **Compounding this** lack of any public interest benefit are the serious public interest harms that the experience would create, in light of the interference that this experiment could cause. Consequently, **OET** should dismiss this application.

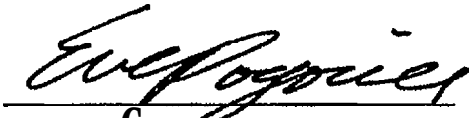
¹² See Attachment B at 1.

¹³ See Attachment B at 3.

Respectfully submitted,

/s

David L. Donovan
Victor Tawil
ASSOCIATION FOR MAXIMUM
SERVICE TELEVISION, INC.
P.O. Box 9897
4100 Wisconsin Avenue, NW
Washington, D.C. 20016
202-966-1956 (tel.)
202-966-9617 (fax)



Jonathan 6. Blake
Eve R. Pogoriler
COVINGTON & BURLING LLP
1201 Pennsylvania Avenue, N.W.
Washington, DC 20004-2401
(202) 662-6000 (tel.)
(202) 662-6291 (fax)

*-Counsel for the Association for Maximum
Service Television, Inc.*

February 6, 2008

Attachment A:
Part 78 Provisions That Clarity's Service Would Violate

- Section 78.1. The Part 78 rules provide for CARS licensing and operations for the purpose of "the transmission of television and related audio signals, signals of standard and FM broadcast stations, signals of **BRS/EBS** fixed stations, and cablecasting from the point of reception to a terminal point from which the signals are distributed to the public by cable..." (emphasis supplied).
- Section **78.11(a)**. CARS stations are authorized only to relay certain signals.
- Section **78.11(c)**. CARS licenses may be issued only to "cable television owners or operators or other eligible system owners or operators, and to cooperative enterprises owned by cable television owners or operators or other eligible system owners or operators." Clarity has conceded that it does not fit the regulatory definition of a cable **system**.¹⁴
- Section **78.11(f)**. "[T]he bands 2025–2110 MHz, **6425–6526** MHz and 6875–7125 MHz may be used by cable network-entities only for CARS pick-up stations." Under Section 78.5, a CARS pick-up station is defined as a "land mobile CARS station used for the transmission of television signals and related communications from the scenes of events **occurring** at points removed from cable television studios to cable television studios or headends" (emphasis supplied).
- Section **78.11(e)**. Section 78.11(f) requires the 2 **GHz** CARS band to be used by CARS pick-up stations. Under Section 78.11(e), CARS pick-up station licenses authorize only "the transmission of program material, and related communications necessary to the accomplishment of such transmission, from the scenes of events occurring in places other than a cable television studio or the studio of another eligible system, to the studio, headend, or transmitter of its associated cable television system or other eligible system, or to such other cable television or other eligible systems as are carrying the same program material" (emphasis supplied). Clarity does not propose such a relay service.
- Section 78.13. Eligibility for CARS licenses is limited to cable television system owners or operators, cooperative enterprises owned by cable television owners or operators, cable network-entities in limited circumstances, **BRS/EBS** licensees and conditional licensees, and private cable operators and other multichannel video programming distributors. The latter entities are not authorized to use the 2 **GHz** CARS band,¹⁵ and in any case, Clarity cannot

¹⁴ See Clarity Application at 26.

¹⁵ Private cable operators and other multichannel video programming distributors have been designated as eligible licensees for the 12.70 to 13.20 **GHz** band, but the Commission has not opened up the 2 **GHz** band to such entities. See Amendment of Eligibility **Requirements** in Part 78 Regarding 12 **GHz** Cable **Television** Relay Service, Report and Order ("12 **GHz** CARS Order"), 17 FCC **Rcd** 9930,9932, at ¶ 1 (2002) (noting that the amendment "will permit all **MVPDs** to use frequencies in the 12.70 to 13.20 **GHz** band").

bootstrap its proposed service to create eligibility as an MVPD. The Commission has already recognized that "Clarity Media will also require a waiver of Section 78.13,"¹⁶

- **Section 78.18.** This section explicitly provides that "[u]se of this spectrum for direct delivery of video programs to the general public or multi-channel cable distribution is not permitted."
- **Section 78.36.** The Commission requires frequency coordination for both fixed and mobile stations in the 2 GHz band. **See** Section 78.36(c)-(d).
- **Section 78.101.** Clarity has requested a waiver of Section 78.101 ("Power Limitations").¹⁷
- **Section 78.103(e).** For licenses in the 2025-2110 MHz range, the maximum authorized bandwidth is 12 MHz. Clarity proposes to use virtually the entire 2 GHz CARS band (84 MHz), seven times the maximum authorized bandwidth. It should be noted that the Commission explicitly provided in Section 78.103(e) that it reserved the right to issue licenses "for less than the maximum bandwidth." The rules do not, in contrast, contemplate licenses for more than the maximum bandwidth, much less for 84 MHz.
- **Section 78.107.** Clarity has requested a waiver of this provision, which governs equipment and installation, on the grounds that it might "impede or delay acceptance, processing, and favorable action" on its applications.¹⁸

¹⁶ See *Waiver Requests by Clarity Media Systems, LLC to Operate CARS Stations at Flying J Travel Plazas*, Public Notice, DA 06-1664, at 1 (rel. Aug. 23, 2006).

¹⁷ See Clarity Application at 41, n.44.

¹⁸ *Id.* at 41.

Attachment B:
Engineering Statement

**ENGINEERING STATEMENT
ON BEHALF OF MSTV
IN SUPPORT OF PETITION TO DENY
NEW EXPERIMENTAL RADIO SERVICE LICENSE
BY CLARITY MEDIA SYSTEMS, LLC
(FILE NO. 0692-EX-PL-2007)**

FEBRUARY 2008

**COHEN, DIPPELL AND EVERIST, P. C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D. C.**

COHEN, DIPPELL AND EVERIST, P. C.

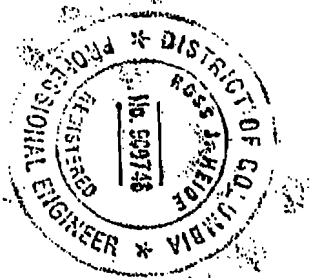
City of Washington)
 }
District of Columbia } ss

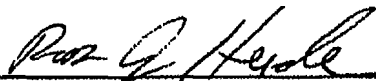
Ross J. Heide, being duly sworn upon his oath, deposes and states that:

He is a graduate of the Massachusetts Institute of Technology in Operations Research and Management Science, a **Registered** Professional Engineer in the District of Columbia, and employed by Cohen, **Dippell** and **Everist**, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., **Suite** 1100, Washington, D.C. 20005;

That the attached engineering report was prepared by him or under **his** supervision and direction and

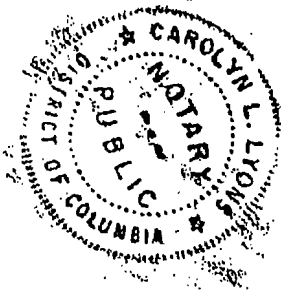
That the facts stated herein **are** true of his own knowledge, except such facts as are **stated** to be on information and belief, and as to such facts he believes them to be true.





Ross J. Heide
District of Columbia
Professional Engineer
Registration No. PE900748

Subscribed and sworn to before me this 1st day of February, 2008.



tary **Public**
My Commission Expires: 2/28/2018

This engineering statement has been prepared on behalf of The Association for Maximum Service Television ("MSTV") in support of a petition to deny the application for a new experimental radio service license (File No. 0692-EX-PL-2007) by Clarity Media Systems, LLC ("Clarity"). This statement shows that the application is defective and that the described experimental program seeks to deviate from the established rules for coordination employed by legitimate users of the 2 GHz broadcast auxiliary ("BAS") band.

Antenna System Not Adequately Specified

In its application, Clarity does not specify the elevation pattern of the new proposed panel antenna. Exhibit No. 1 of the Clarity application describes "Four degrees of electrical and up to 30 degrees of mechanical beam down-tilt".¹ More than 4 degrees of mechanical tilt would place the maximum elevation gain above the horizontal and for at least some azimuths. The half-power beam width of 120 degrees does not adequately describe the azimuth pattern. For those azimuths where the elevation pattern maximum could be above the horizontal, the net effect cannot be **determined** without the specific azimuth pattern, elevation pattern, and mechanical tilt.

Clarity Attempts to Redefine Interference

Clarity predicates its experimental program on the acceptance of an 8 dB D/U ratio for a mobile ENG until operating in close proximity to the Clarity sites. This presumption is fatally flawed because it:

- is not the current interference standard used by the Industry or the FCC

¹ Clarity FCC Form 442, Exhibit No. 1, 111.A.4.C.

- continues to ignore the interference impact on ENG receive sites
- falsely claims broadcast community agreement

The current standard for microwave link interference is based on TSB-10-F as has been consistently applied in **MSTV's** previous submissions. Opponents to Clarity's proposals have not attempted to devise a new methodology to create the appearance of interference. Far from it, the only reasonable approach is to utilize the defined and accepted method established through rulemaking that existing, legitimate users of the 2 GHz band employ for coordination and interference prevention.

Clarity claims that the November 8, 2007 engineering statement provided by MSTV supports its use of the 8 dB D/U ratio.² This is a complete misrepresentation **of the** MSTV submission. Moreover, we find no basis for Clarity's claim that OET officials requested the parties to "reach an agreed-upon D/U signal technical standard"?

Clarity seeks to set a "harmful interference" standard at some undesired signal level where the victim equipment will still function. This does not account for inherent fading and variability in microwave links. The established standard, threshold degradation, or interference that effectively de-rates the equipment in the victim link, is accepted for the specific reason of inherent fading.

Unlimited Potential Scope

Clarity is attempting to establish its new definition of interference as the basis for what would be a virtually unlimited number of potential similar operations.

² Ex. 1 11. 3" paragraph.

³ Ibid.

In the U.S., there are:

- over 2,000 truck stops
- over 3,000 RV campgrounds
- over 2,500 Wal-Mart's, most of which allow over-night RV parking

Moreover, the potential requests go far beyond a local broadcast system. Similar emission profiles, essentially even power over 84 **MHz**, could be used in any number of local area networks for virtually any purpose. If this requested precedent for destructive interference is established, the flood of requests to the **FCC** is sure to follow.

Proposed Power Reduction Is Not Dramatic

Although the TPO has been reduced to 50 **mW** from 200 **mW** (per 6 MHz) in Clarity's most recent submission, with the additional directional gain of the new antenna, the peak EIRP would be reduced to about 40% (-4 dB) of the value in prior Clarity submissions. While this would reduce the interference distances somewhat **from** those calculated in **MSTV's** November 2007 analysis, a Clarity type operation would still create significant areas of impaired operation for BAS services. A proliferation of Clarity or similar small local networks would be similar to "the death by a thousand cuts" for **ENG 2 GHz** microwave links.

Interference Definition, Not Propagation Uncertainty Is Main Issue

Clarity's proposed signal strength measurement program would not **determine** the potential for interference. There is actually very little uncertainty as to the undesired signal strength that would be present within 2.4 kilometers of the Clarity transmitter. If Clarity adequately defines the system parameters and the Clarity transmission system performs as designed, undesired signal strengths could be reliably (and uncontentionously) calculated for most situations, whether assuming freespace or Longley-Rice F(50,10) propagation. In short, there is no need for experimental operations.

The real issue in question is the definition of interference. Through its application, Clarity wants the FCC to endorse the definition of interference as 8 dB below the ENG desired signal at a given location. Moreover, Clarity asks the FCC to endorse the concept that if an ENG link can be made to work originating at these two tailored application sites, this is sufficient proof that its systems, or a potential myriad of other operations with effectively the same emission profile, will never cause interference.

Resolution to Clarity's (and inevitable followers') proposals to use the 2 **GHz** BAS band depends not on determining the propagation of the undesired signal, but in the Commission reaffirming the existing interference standard or, alternatively, creating a new one, for which we know of no justification. In either case, this proposal and the never-ending subsequent proposals, could be evaluated without resort to any experimental operations.

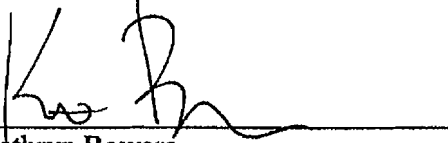
Clarity predicates its experimental application on its chosen definition of interference and will claim that the grant of the application is an FCC endorsement of this definition. If a change in coordination methodology is contemplated, this must be done through the rulemaking process.

CERTIFICATE OF SERVICE

I, Kathryn Bowers, a secretary at the law firm of Covington & **Burling** LLP, do hereby certify that on this 6th day of February, 2008, I caused a copy of the foregoing "**Petition to Deny**" to be sent via first-class U.S. Mail, postage prepaid, to the following:

Clarity Media Systems, LLC
4185 Harrison **Blvd.**
Suite 301
Ogden, UT 84403

Howard A. **Topel**
Stephen D. Baruch
Leventhal Senter & Lerman PLLC
2000 **K** Street, NW
Suite 600
Washington, DC 20006-1809
Counsel for Clarity Media Systems, LLC


Kathryn Bowers