

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

ORIGINAL

RECEIVED

AUG 28 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

MM Docket No. 95-47

RM-7567

DOCKET FILE COPY ORIGINAL

In the Matter of)
)
Amendment of Part 95 of the)
Commission's Rules To Allow Interactive)
Video and Data Service Licensees)
To Provide Mobile Service to Subscribers)

To: The Commission - Mail Stop 1170

OPPOSITION OF RADIO TELECOM & TECHNOLOGY INC.
TO PETITION FOR RECONSIDERATION

1. Radio Telecom and Technology, Inc. hereby opposes the "Petition for Partial Reconsideration" of the Commission's *Report and Order* in the above-captioned proceeding,^{1/} filed by the National Association of Broadcasters ("NAB") on July 25, 1996. RTT is a manufacturer of type-accepted IVDS equipment^{2/} and participated in earlier phases of this proceeding, filing comments on June 26, and reply comments on July 11, 1995.

2. NAB's principal objection to the new rules is the establishment of a power limit for mobile RTU's expressed as "mean" power instead of "peak" power. RTT took the position in its initial comments that mean power was the correct method of measurement. It urges here that the Commission's decision was correct and should not be disturbed. NAB greatly exaggerates the potential consequences of mean power measurement when it suggests that the rule will necessarily permit RTU's to operate with up to 72 watts peak power and CTS's to operate with 14,400 watts peak power. RTT also does not agree with NAB that peak power is "the technically valid characteristic to use in the regime of power limitation."^{3/}

^{1/} FCC 96-224, released May 30, 1996, 61 FR 32710 (June 25, 1996).

^{2/} RTT's IVDS system is known as "T-NET".

^{3/} NAB Petition for Reconsideration at page 3.

No. of Copies filed
Date Filed

024

3. As RTT pointed out in its initial comments, T-NET RTU's have been designed to operate with a peak transmitter power output of 10 watts (maximum ERP of 20 watts), but the average power is under 100 milliwatts. These units also use time division to protect adjacent-channel broadcasters from interference,^{4/} and no problems have been observed in repeated testing at this power level. RTT is confident that its test results are valid^{5/} and that there will be no interference to television reception in the future from any T-NET transmitter.

4. If the Commission does not choose to leave the existing rule intact, the short answer to NAB's problem is for the Commission to adopt the proposal that RTT made in its initial comments, which is that the power of RTU's operated at itinerant locations be limited to 100 milliwatts average power, or 20 watts peak power, whichever is less. In other words, RTT has no objection to the Commission's retaining the existing fixed RTU power limit of 20 watts as a peak power limit for mobile RTU's, with an alternative 100 mW average power limit. That way, the benefits of expressing the 100 mW limit in terms of mean power may be retained, while avoiding the theoretical extreme circumstances postulated by NAB. As an alternative, RTT recommends that power be averaged over a period of not more than 100 milliseconds, again allaying NAB's fear that power might be averaged over a period as extreme as one hour.

5. NAB also asks that the duty cycle not be relaxed for CTS's and fixed RTU's unless they are at least 10 miles outside the Grade B contour of a Channel 13 television station and that the duty cycle for mobile RTU's not be relaxed at all. RTT agrees that the potential for interference to television reception does not end abruptly when a mobile RTU crosses outside

^{4/} The T-NET system transmits only during the blanking intervals of a nearby Channel 13 television station, so T-NET signals that are strong enough to have interference potential arrive at television receivers only when the visual image is blanked out.

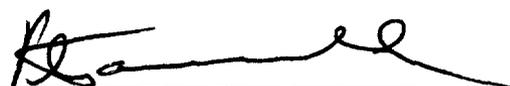
^{5/} RTT's conclusions are based on both theoretical analysis and empirical observation.

a Grade B contour line, and it also agrees that eliminating duty cycle restrictions can increase the likelihood of interference that is perceptually objectionable to the television viewer, unless other steps are taken to eliminate interference. It is exactly for the purpose of eliminating interference that the T-NET system restricts all transmissions to TV blanking intervals and uses a limited duty cycle for all RTU's -- both fixed and mobile -- resulting in an average power level that is only a small fraction of the 20-watt fixed RTU limit. Where alternative control factors such as T-NET's are properly applied, there is no need for an independent duty cycle limit; but where IVDS signal transmissions are not coordinated to protect a potential victim TV signal, the NAB's argument makes more sense.

6. RTT has also reviewed the separate petition for reconsideration filed by Euphemia Banas, *et al.*, asking that mobile RTU's be permitted to operate with a full 20 watts of power and that at least one watt be permitted. RTT believes that it is more prudent to initiate mobile operation with 100 mW mean power, with consideration of an increase deferred until more field experience has been gained with mobile operation.

Radio Telecom and Technology, Inc.
6951 Flight Rd., Suite 210
Riverside, CA 92504
Tel. 909-687-3660
Fax 909-687-3892

Respectfully submitted,


Peter Tannenwald

Irwin Campbell & Tannenwald, P.C.
1730 Rhode Island Ave., N.W., Suite 200
Washington, DC 20036-3101
Tel. 202-728-0400
Fax 202-728-0354

August 28, 1996

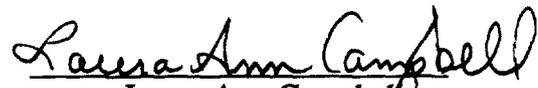
Counsel for Radio Telecom and
Technology, Inc.

CERTIFICATE OF SERVICE

I, Laura Ann Campbell, do hereby certify that I have, this 28th day of August, 1996, caused to be sent by first class mail United States mail, postage prepaid, copies of the foregoing "Opposition of Radio Telecom & Technology, Inc. to Petition for Reconsideration" to the following:

Henry L. Baumann, Esquire
Barry D. Umansky
National Association of Broadcasters
1771 N Street, N.W.
Washington, DC 20036

J. Jeffrey Craven, Esquire
Paul C. Besozzi, Esquire
Janet Fitzpatrick, Esquire
Patton Boggs, LLP
2550 M Street, N.W., 4th Floor
Washington, DC 20037


Laura Ann Campbell