

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC. 20554

In the Matter of)	
)	
Allocations and Service Rules for the 71-76 GHz, 81-86 GHz, and 92-95 GHz Bands)	WT Docket No. 02-146
)	
Loea Communications Corporation Petition for Rulemaking)	RM-10288
)	
)	
)	

To: The Commission

**COMMENTS of Nikolaus E. Leggett
N3NL Amateur Radio Operator**

The following is the second set of comments from Nikolaus E. Leggett, an amateur radio operator (Extra Class licensee – call sign N3NL), inventor (U.S. Patents # 3,280,929 and 3,280,930 and one electronics invention patent pending), and a certified electronics technician. I submitted my first set of comments in this proceeding on September 4, 2002. I have been an amateur radio operator since the 1960s and I have participated in other FCC rulemaking proceedings.

In Footnote 11 on Page 4 of the Notice of Proposed Rulemaking (NPRM), the Commission states: “Therefore it is unclear whether the 75.5 – 76 GHz amateur radio band is being used.”

Actually there is ample documentary evidence of recent use of 75 GHz and higher frequencies by amateur radio operators. Please refer to Appendix A of this document that

presents a brief quote from the “World Above 50 MHz” column that is conducted by Mr. Emil Pocock, W3EP, of the American Radio Relay League (ARRL). This column has reported that amateurs have recently used 75 GHz to communicate over 100 kilometers in distance using tropospheric propagation modes. In addition, the ARRL magazine QST reports a new World 75 GHz distance record. Refer to Page 97 of the February 2002 issue of QST magazine.

As an inventor, I am strongly interested in these upper frequency ranges. They offer a fine frontier for the development of wide-band high-capacity communication systems. In addition, these frequencies offer opportunities for developing portable radar sensory devices for use by the visually impaired and for use by robotic vehicles. Independent inventors working as amateur radio operators can make major contributions to this development.

Respectfully submitted,

Nickolaus E. Leggett, N3NL
1432 Northgate Square, Apt. 2A
Reston, VA 20190-3748
(703) 709-0752
nleggett@earthlink.net

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APPENDIX A

Distance Records Reported by the ARRL Internet web site – The World Above 50 MHz, Conducted by Emil Pocock, W3EP

75 GHz Tropo (C) 172 AD6FP/6 (CM88qp) -- KF6KVG/6 (CM97ae) 01-Mar-2002
Tropo (C) 172 W0EOM/6 (CM88qp) -- KF6KVG/6 (CM97ae) 01-Mar-2002
Tropo (C) 110 K2AD (EM96ur) -- W2SZ (FM07fm) 20-May-1999
Tropo (C) 60 W2SZ (FM07fm) -- WA4RTS (FM08ia) 01-May-1999
Tropo (C) 12.7 W0EOM (CM87uk) -- AA6IW (CM87vi) 11-Dec-1997

120 GHz Tropo (C) 11.7 KF6KVG/6 (CM87uk) -- W0EOM/6 (CM87wj) 19-Oct-1999
Tropo (C) 1.1 WA1MBA (FN32ri) -- WB2BYW (FN32rj) 11-Jul-1994

142 GHz Tropo (C) 61.6 W2SZ/4 (FM07fm) -- WA4RTS/4 (FM08ib) 01-Jan-2001
Tropo (C) 34 WA1ZMS (FM05fm) -- WA4RTS (FM05ji) 06-Nov-2000
Tropo (C) 11.7 KF6KVG (CM87uk) -- W0EOM (CM87wj) 19-Oct-1999
Tropo (C) 3.8 WA1MBA (FN32ri) -- WB2BYW (FN32rj) 02-May-1993

241 GHz Tropo (C) 11.4 WA1ZMS/4 (FM07ln) -- W4WWQ/4 (FM07jn) 11-Mar-2002
Tropo (C) 7.3 WA1ZMS (FM07jj) -- W4WWQ (FM07ji) 23-Feb-2002
Tropo (C) 1.1 W2SZ (FM07ji) -- WA4RTS (FM07ji) 15-Dec-2001

Micrometer Radio 322 GHz 0.5 WA1ZMS/4 (FM07ji) -- W4WWQ/4 (FM07ji) 01-Mar-2002
322 GHz 0.05 W2SZ (FM07ji) -- WA4RTS (FM07ji) 15-Dec-2001

Light 474 THz 192.6 WB7VVD (DM34hb) -- KC7AED (DM43iq) 21-Sep-1997
678 THz 248 WA7LYI (DM34tf) -- KY7B (DM42ok) 08-Jun-1991

Tropo (C) (tropospheric modes across continental North America)
Distances presented in kilometers.