Triton Network Systems, Inc.
8529 Southpark Circle
Orlando, Florida 32819

February 25, 2000

Federal Communications Commission
Experimental Radio Services
P.O. Box 358320
Pittsburgh, PA 15251-5320

Re: Triton Network Systems, Inc. ("Triton")
Request for Special Temporary Authority ("STA")
Covering Operations In The 39.5-40.0 GHz Band ("39 GHz Band")

Dear Sir or Madam:

This is a request for STA, submitted pursuant to FCC rule section 5.61, 47 C.F.R. § 5.61 (1998). Triton seeks STA, for a time period not to exceed one hundred and eighty (180) days, to test and operate fixed microwave equipment in the 39.5 – 40.0 GHz frequency band on a nationwide basis. Pursuant to rule section 5.61, Triton specifies the following information in support of its request for STA:

(1) Name, address, phone number (also e-mail address and facsimile number, if available) of the applicant.

See above. Triton's points of contact are Michael Clark, Vice President of Engineering, 907-903-0901, and its FCC counsel, Russ Taylor, Gardner, Carton & Douglas, 1301 K Street, NW, Suite 900, Washington, D.C. 20005, (202) 408-7172, rtaylor@gcd.com. The FCC may correspond with Triton's counsel via facsimile no. 202-289-1504.

(2) Description of why an STA is needed.

Triton is an **existing experimental licensee in the 39 GHz frequency band under call sign WA2XVW**. See attached copy of license. That call sign is intended to cover the 38.6 – 40.0 GHz frequency band. However, the license for WA2XVW was issued with only frequency assignments 38.6 – 39.5 GHz specified, omitting most of the important "B-side" channels. In particular, under Triton's current authorization, it is only permitted to test on 39 GHz channels 1A – 14A and 1B – 4B. 47 C.F.R. § 101.147(v) (1999). Because Triton's communications technology requires *paired* spectrum blocks of at least 50 MHz of bandwidth each, the current authorization does not permit a full range of testing across the 39 GHz band. Accordingly, Triton requires use of the 39.5 – 40.0 GHz frequency band.

The 39 GHz band will be auctioned by the FCC on April 12, 2000. See *Public Notice* DA 00-112, rel. Jan. 21, 2000. Soon, commercial operations will commence in all portions of the 39 GHz band. In fact, many so-called "incumbent" licensees already occupy portions of the 39 GHz band and are offering services. Accordingly, STA is urgently required to permit Triton to commence testing and operation of fixed wireless microwave transmission equipment intended for this expanding market. Triton also intends to perform one or more on-site demonstrations of its equipment and associated technology for potential 39 GHz auction participants.

Depending on the outcome of its testing and operations, Triton will likely attempt to secure permanent modification of its Part 5 experimental authorization associated with call sign WA2XVW.

(3) Description of the operation to be conducted and its purpose.

See above. The STA operations would be the same as those operations already authorized under Triton's call sign WA2XVW. Triton is leading manufacturer of millimeter wave digital transmission equipment intended for data and telephony providers. See www.triton-network.com.

(4) Time and dates of proposed operation.

Triton desires to commence STA operations as soon as possible, and intends to test intermittently for a period of one hundred and eighty (180) days.

(5) Class(es) of station (fixed, mobile, fixed and mobile) and call sign of station (if applicable).

Fixed.

(6) Description of the location(s) and, if applicable, geographical coordinates of the proposed operation.

See call sign WA2XVW – Nationwide operations.

(7) Equipment to be used, including name of manufacturer, model and number of units.

The transmission equipment used in conjunction with Triton's STA operations is experimental and will be manufactured by Triton. Triton may also use other "off-the-shelf" equipment, antennas, cabling, etc.

(8) Frequency(ies) desired.

39500 MHz to 40000 MHz – the 39.5 – 40.0 GHz Band.

(9) Maximum effective radiated power (ERP) or equivalently isotropically radiated power (EIRP).

4170 EIRP.

(10) Emission designator (see §2.201 of this chapter) or describe emission (bandwidth, modulation, etc.).

50M0D1D.

(11) Overall height of antenna structure above the ground (if greater than 6 meters above the ground or an existing structure, see Part 17 of this Chapter concerning notification to the FAA).

Triton does not intend to mount its transmission equipment on any antenna structure that is greater than 6 meters above an existing structure. Triton's antenna and mounting structure are less than 3 meters in height.

* * *

Triton certifies that it is not subject to the denial of federal benefits pursuant to the Anti-Drug Abuse Act of 1998.

Based on the foregoing, Triton respectfully requests that the FCC issue STA for Triton to test and operate its equipment in the 39.5-40.0 GHz frequency band.

Respectfully submitted,

Triton Network Systems, Inc.

David Hall

DIRECTOR, PRODUCT MANAGEMENT
Title