

Du-Comm STA – Fire NORTH

Request for Special Temporary Authorization Under 47 USC § 5.56

Purpose of Request

By this application, Du-Comm seeks a new Special Temporary Authorization. To operate unauthorized stations for a limited time only. The following information is provided in support of this application:

Background Information

DuPage Public safety Communications (Du-Comm), an association of units of local governments, as they are defined in Article VII, Section 1, of the Constitution of State of Illinois, 1970, and a "public Agency" as defined in the Intergovernmental Cooperation Act, 5 ILCS 220/2 (1), that is voluntarily established by its members pursuant to Article VII, Section 10 of the Constitution of the State of Illinois, and the Intergovernmental Cooperation Act, 5 ILCS 220/1 et seq. is actively engaged in the development of Innovative Telecommunications Techniques, and the innovative application of Conventional or Traditional Telecommunications Techniques, as applied to Public Safety Communications, in general, and Inter –Agency Communications in particular..

Du-Comm is a Self-Maintained End-User of telecommunications devices supplied by a variety of manufacturers. Du-Comm employs a full-time staff of Four Technicians, assisted by Two Part-Time Technicians.

Du-Comm is actively engaged in strategic partnerships with various vendors, to provide a real-world platform for the development of these techniques, and the advancement of the state of the art as applied to the Public Safety Sector.

To further this endeavor, on 01/OCT/09, Du-Comm was granted an **EXPERIMENTAL RADIO STATION CONSTRUCTION PERMIT AND LICENSE**, under the Call Sign **WE2XGW, File Number 0181-EX-RR-2009**, by The Federal Communications Commission.

(1) For purposes of This Action, the Following Information is submitted.

Applicant: DuPage Public Safety Communications
Attn: Bob Hodge
600 Wall Street
Glendale Heights, Il, 60139-1900

Tel: (630) 260-7500
Fax: (630) 924-9280
Email: Tower@Ducomm.org

(2) Need for Special Temporary Authorization

Du-Comm seeks to test, evaluate, and operate radio equipment, for the purpose of evaluating and developing the functionality and practicality of a NEW Multi-Site Simulcast Narrow-Banded Tactical EMS / Fire Dispatch System.

Du-Comm presently has authorization to operate Radio Transmitters at two of the proposed Test Locations, and Test Frequencies, under the Call-Sign **WE2XGW**, but has no authorization to operate transmitters at THREE OTHER Proposed Test Locations. Without authorization to operate Radio Transmitters at the Two Additional, Proposed, Locations, Du-Comm is unable to properly trouble shoot, and align such a system. Du-Comm is unable to properly trouble shoot, and align such a system on a Du-Comm Authorized Operational Tactical Dispatch Channel without creating undue confusion and delay to the Tactical EMS and FIRE Dispatch operations in progress on That Channel.

(3) Type of Operation

The type of operation will be limited to short duration transmissions of: Simulated Fire / EMS Dispatch Traffic, The Transmission of Test tones required for the establishment of proper system alignment and performance evaluation, and Transmission of an Unmodulated carrier, as required for the establishment of proper system alignment, and performance evaluation.

(4) Purpose of Operation

Du-Comm is proposing to Install, Test, and Fine Tune the Multi-Site Simulcast System under the terms of the **Proposed Special Temporary Authorization**, and then at the appropriate time, Du-Comm will vacate the Test Frequencies, and change the Transmitter Frequency to its Permanent, Authorized Frequency

(5) Time and Dates of Proposed Operation:

The Times of operation will be primarily limited to daylight hours, at various times, commencing with the Date of Issuance of **The Special Temporary Authorization**, And extending for no later than Six Months without further authorization.

(6) The Proposed Classes of operation will be:

Site	Class
Site 1	FB2, FB
Site 2	FB2, FB
Site 3	FB2, FB
Site 4	FB2, FB
Site 5	FB2, FB
Mobile	MO

(7) The Proposed Locations will be:

Site	Location	Lat	Lon
Site 1	Glendale Heights, Il	N41-56-05	W088-05-57
Site 2	Wheaton, Il	N41-51-53	W088-08-38
Site 3	West Chicago, Il	N41-53-07	W088-12-21
Site 4	Glenn Ellyn, Il	N41-51-41	W088-04-29
Site 5	Glenn Ellyn, Il	N41-52-46	W088-04-14
Mobile	Various Random Locations, within 42 Km of Site # 1		

(7a) The Proposed Sites are described as:

Site	Description
Site 1	Existing Former AT&T Type "M" Steel Lattice Tower
Site 2	Existing 280 Foot Steel Lattice Tower
Site 3	Existing Water Tower
Site 4	Existing Water Tower
Site 5	Existing Water Tower
Mobile	a) Three Ford E-250 Super-Duty Vans, White, With No Markings, Using Medium Power Dash- Mountable Mobile Radios, and Unity Gain Antennas. b) Hand Held Radios, on foot outside and inside of the described above vehicles.

(8) The Proposed Equipment to be used will Be:

Site	Equipment Description
Site 1	Tait 8100 Transceiver Tait QS2 Controller
Site 2	Tait 8100 Transceiver
Site 3	Tait 8100 Transceiver
Site 4	Tait 8100 Transceiver
Mobile	Various Vehicular Mounted and Hand-Held Radios Manufactured by Thales, Tait, Motorola, and Harris

(9) The Frequencies Desired are:

Site	Frequency
Site 1	154.5275 Mhz
Site 2	154.5275 Mhz
Site 3	154.5275 Mhz
Site 4	154.5275 Mhz
Mobile	158.4075 Mhz 154.5275 Mhz

(10) The Maximum ERP Requested will be:

Site	ERP
Site 1	100 Watts*
Site 2	100 Watts*
Site 3	100 Watts*
Site 4	100 Watts*
Mobile	100 Watts* 5.0 Watts*

*Note: The Actual Site ERP will be adjusted to various levels throughout the Test Period, not to exceed the requested ERP Level. The ERP level adjustments are necessary to verify system design parameters, and determine the optimum ERP for Desired System Operation.

(11) Emission Designator:

The Emission Designator for All Units under This Authorization Shall be 11K0F3W

(12) Over-All Height of Antennas.

The Test Locations will use Retired Antennas and Feedlines that are already in place, on existing structures, with a Mounted Antenna Height not to exceed 140 Feet above Ground Level, at the Base of the Supporting Structure. As such, no notification is required under 47 CFR part 17.

Public Interest:

Du-Comm Submits that issuance of This Authorization is in the public interest, convenience, and necessity. Grant of This Authorization will permit Du-Comm to provide a unique real-world Public Safety platform for the stimulation of the development of innovative telecommunications equipment and techniques as applied to daily Public Safety Communications operations, without causing undue confusion and delay to Fire and EMS Dispatch Activities on the Fire / EMS Channels in use. .

Once the operating parameters of the System Under Test are determined and defined to be in their final state, the System Under Test will vacate the Test Frequencies, and be switched to the Final Authorized Operating Frequencies.

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