

**Engineering STA Request
For Non-Directional Operation
WTTI (AM) - 1530 kHz – 10 KW (DA)
Dalton, GA
February 2022**

Narrative

WTTI is an AM broadcast station in Dalton, GA owned by Hope Broadcasting, Inc, Facility ID 53957. On February 12, while a tractor was cutting the grass of the AM antenna field, the tractor snagged a guy wire and caused one of the two WTTI towers to fall and was knocked off the air. WTTI immediately requested an STA to be silent. Now, arrangements are being made for emergency reduced-power operation utilizing the one remaining tower. WTTI has two directional patterns, one for day operation and one for critical hours operation. Both patterns have a licensed power of 10 KW. This request is for non-directional operation with reduced power for both Day and Critical Hours modes.

WTTI STA Site – These coordinates vary slightly from the WTTI licensed coordinates because this is the precise location of the remaining tower and not the center of the 2-tower array. The coordinates were obtained from Google Earth and transposed to NAD 27:

NAD 27
34 47 02.8 N
85 02 43.4 W

Requested STA Power:
1.0 KW Day – 0.5 KW Critical Hours

Frequency:
1530 kHz

Radiator height above base insulator (see attached drawing):
49 M
90 Electrical Degrees

Theo RMS:
305.77 mV/m @ 1 KM

Protective Fence:

The existing fence was designed to protect persons near a 10 KW AM station. STA operation at 1 KW would remain within radiation guidelines with no changes required to the fence.

This information is thought to be accurate to the knowledge of the undersigned:



Clifton G. Moor
Technical Consultant to
Hope Broadcasting, Inc.

February 23, 2022

Bromo Communications, Inc.

OVERALL
STRUCTURE
49.90 m
(163.7 ft)
AGL
325.43 m
(1067.7 ft)
AMSL

AM
RADIATOR
48.98 m
(160.7 ft)

Base Insulator 0.9 m (3.0 ft)

North Latitude 34-47-03

West Longitude 85-02-43

Site Elev 275.54 m (904.0 ft) AMSL

(Sketch not drawn to scale)

Vertical Plan Sketch

SITE ELEVATION - 276 m (904 ft) AMSL

TOP OF STRUCTURE - 50 m (164 ft) AGL
325 m (1068 ft) AMSL

AM Radiator - 49 m (161 ft)

FIGURES ROUNDED TO NEAREST METER (FOOT) .

STA Request

WTTI (AM)

1530 kHz

1 kW Daytime – 0.5 kW Critical Hours

Dalton, Georgia

February 2022

BROMO BROADCAST
COMMUNICATIONS TECHNICAL CONSULTANTS