

## WMEX-LP PROPOSED MINOR CHANGE – JULY 12, 2018

### Determination of HAAT:

**Antenna Height Above Average Terrain Calculations -- Results**

**Input Data**

Latitude **43° 17' 7" North**  
Longitude **70° 56' 29" West (NAD 27)**  
  
These coordinates convert to NAD 83 coordinates of  
43° 17' 07.30", North, 70° 56' 27.22" West (NAD 83).  
  
Height of antenna radiation center above mean sea level: **141 meters AMSL**  
  
Number of Evenly Spaced Radials = **360**     0° is referenced to True North

**Results**

Calculated HAAT = **47 meters**  
  
Antenna Height Above Average Terrain calculated  
using 1 km **GLOBE terrain data**

### Determination of ERP:

Select Contour Type: 

F(50,50) Service Contour -- FM and NTSC (analog) TV  
F(50,10) Interfering Contour  
F(50,90) Digital TV Service Contour

Select Channel Range:  
(not TV Virtual Channel) 

FM Radio or TV Transmit Channels 2-6  
TV Transmit Channels 7-13  
TV Transmit Channels 14-69

Find This: 

Field Strength, given a Distance (in km)  
Distance, Given a Field Strength (in dBu)  
FM ERP, given Distance and Field Strength [F(50,50) Service Contour]

.041

ERP (kW)

Distance (km)

47

HAAT (meters)

60

Field (dBu)

Find Result

Clear Form

Results:

Calculated Distance = **5.649 km**