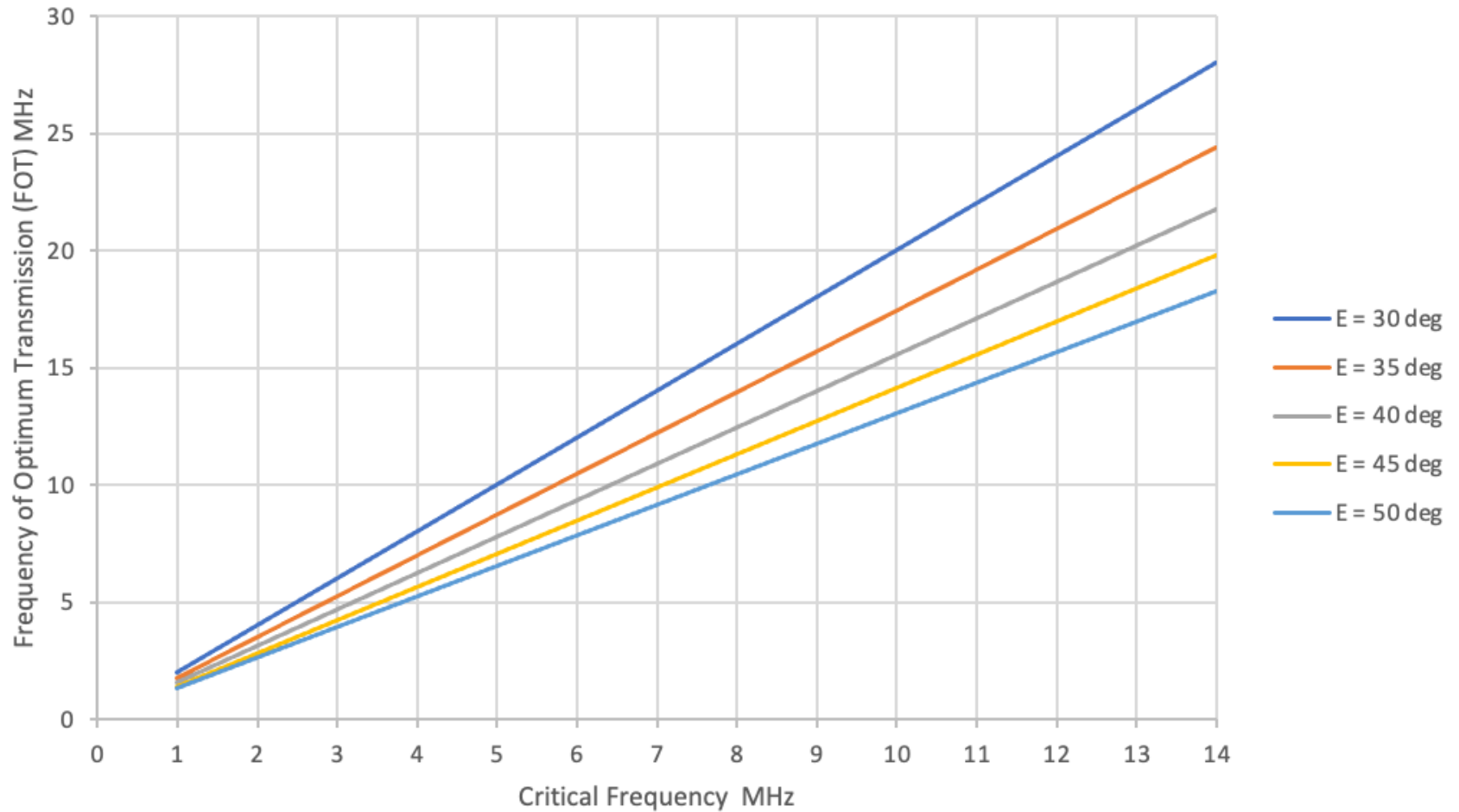
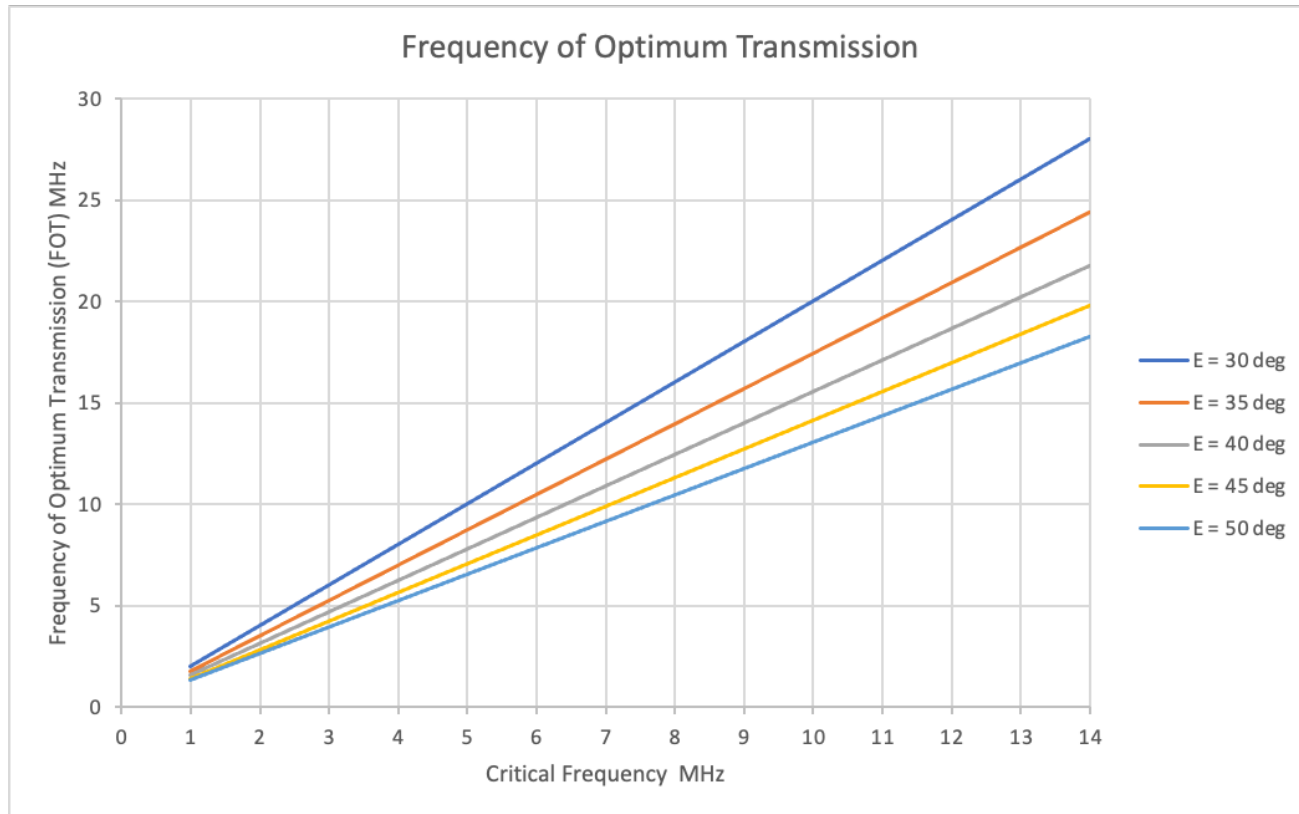


Frequency of Optimum Transmission



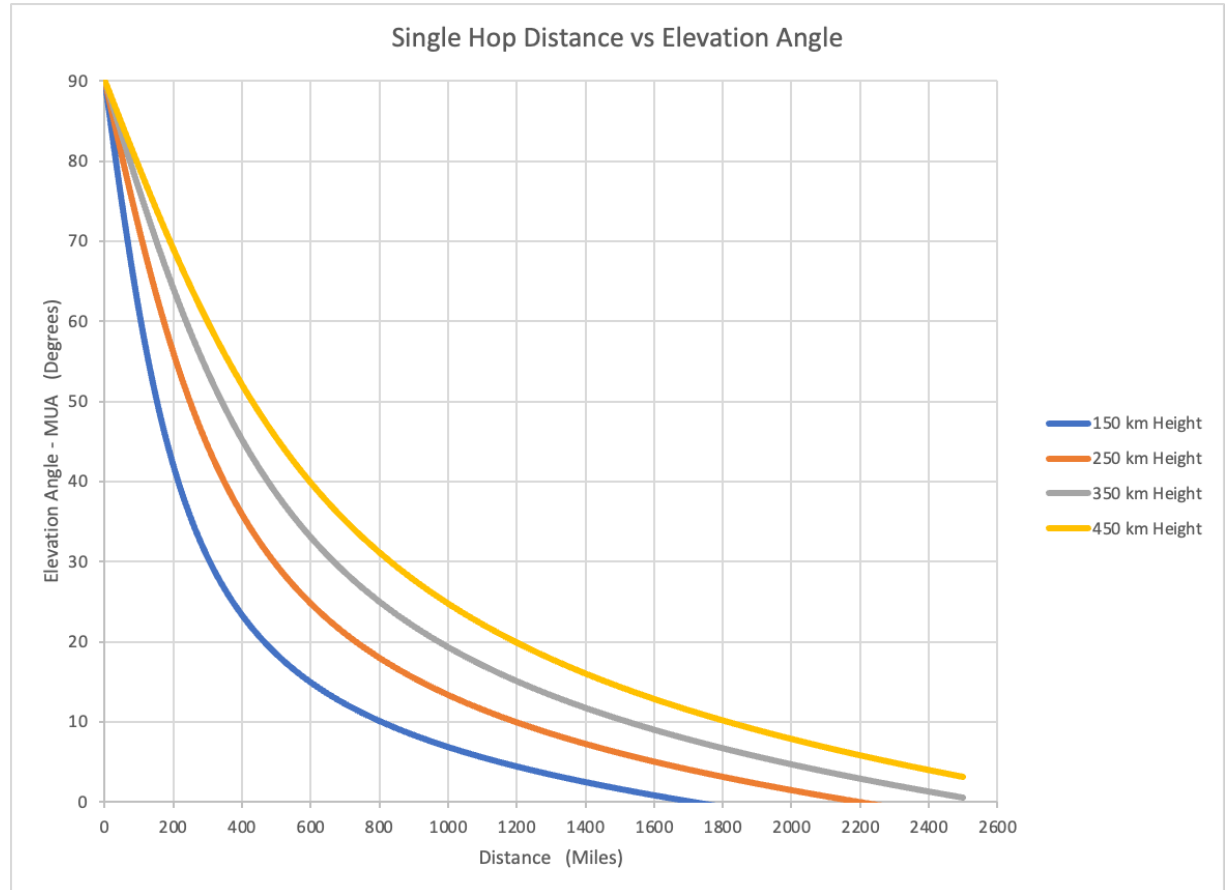
Frequency of Optimum Transmission



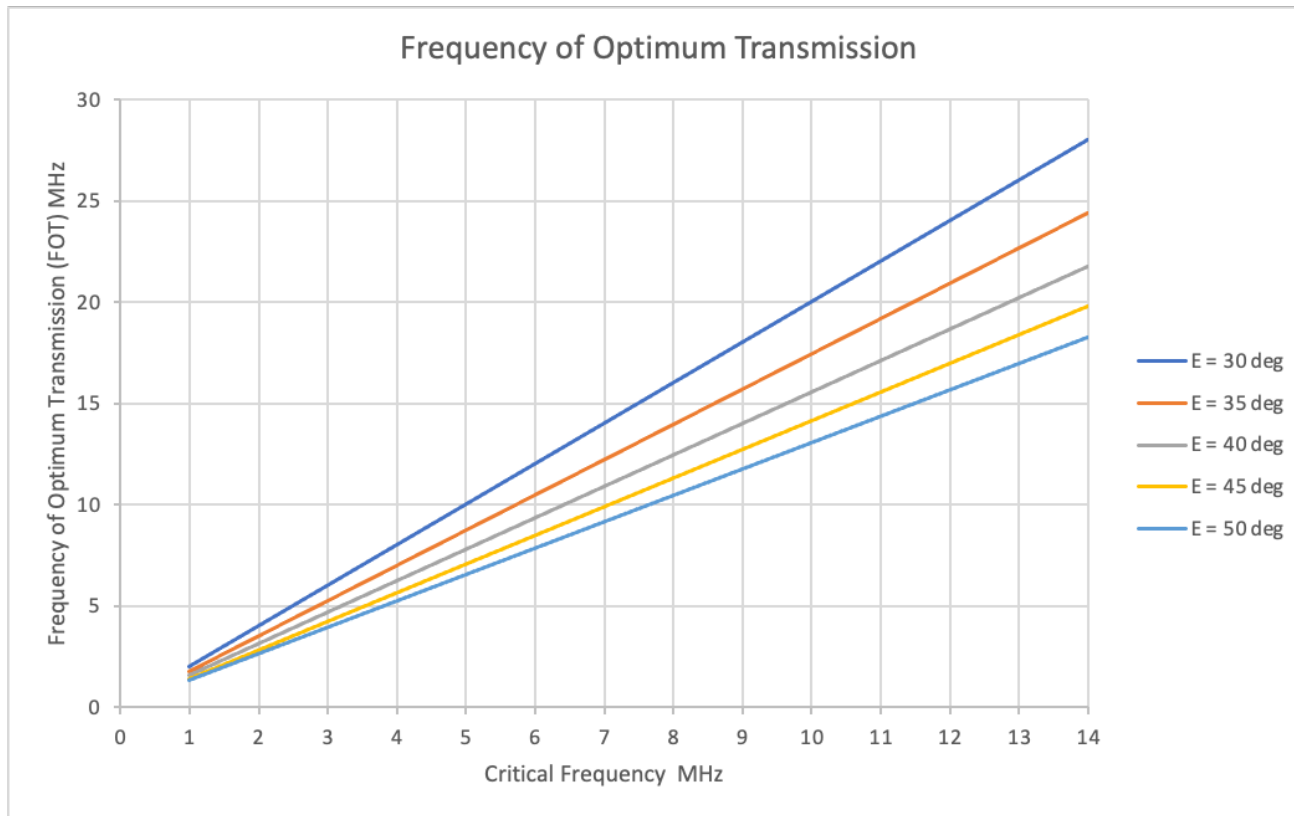
- The following steps are used to determine the Frequency of Optimum Transmission (FOT) to reach a desired destination radio station

Elevation Angle vs Distance

- Determine the distance from your location to your desired destination radio station
- Go to Ionograms under the Current Conditions tab of the www.skywave-radio.org web site and determine the current height of the ionosphere's F2 region
- Combine this information to determine the elevation angle required to reach your desired destination
- Example, for a distance of 300 miles and a F2 height of 250 km (red trace) the required angle is approximately 45°



Frequency of Optimum Transmission



- Next, determine the current critical frequency by clicking on Critical Frequency under the Current Conditions tab of the www.skywave-radio.org web site
- Knowing the critical frequency and the required elevation angle for your transmission, use the FOT chart to determine the Frequency of Optimum Transmission
- Example, for a critical frequency of 8 MHz, and a required elevation angle of 45° (yellow trace) the estimated FOT = 12 MHz