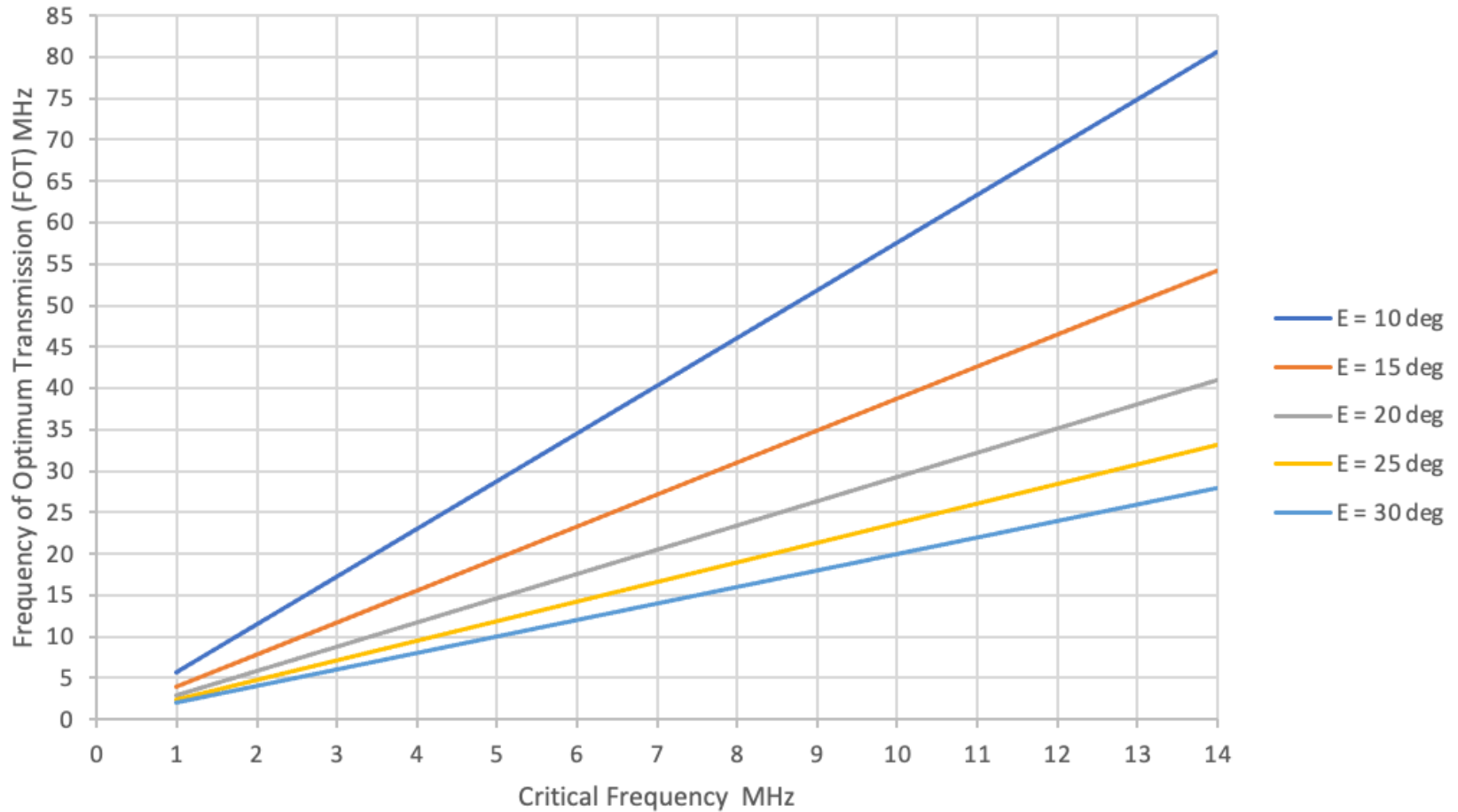
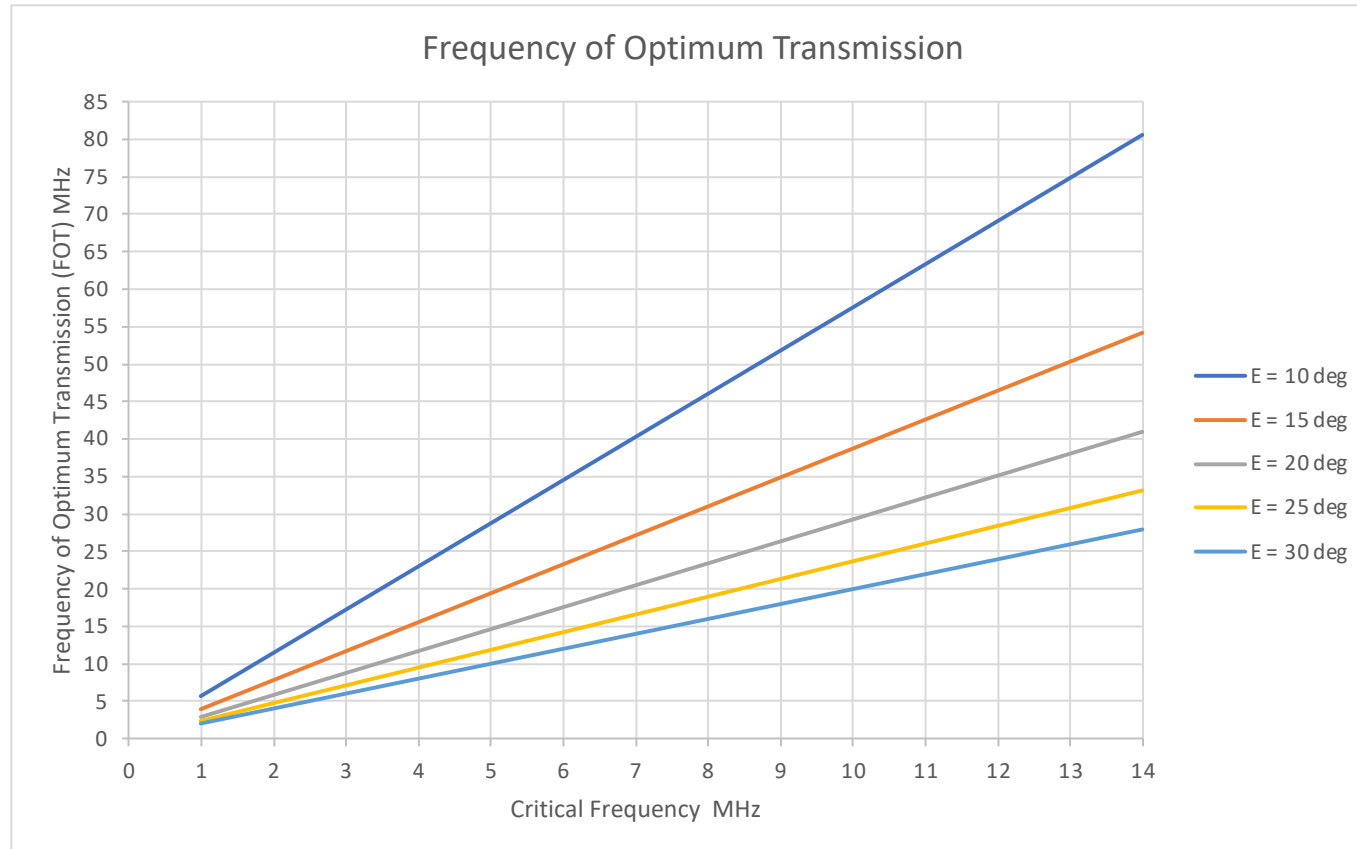


## Frequency of Optimum Transmission



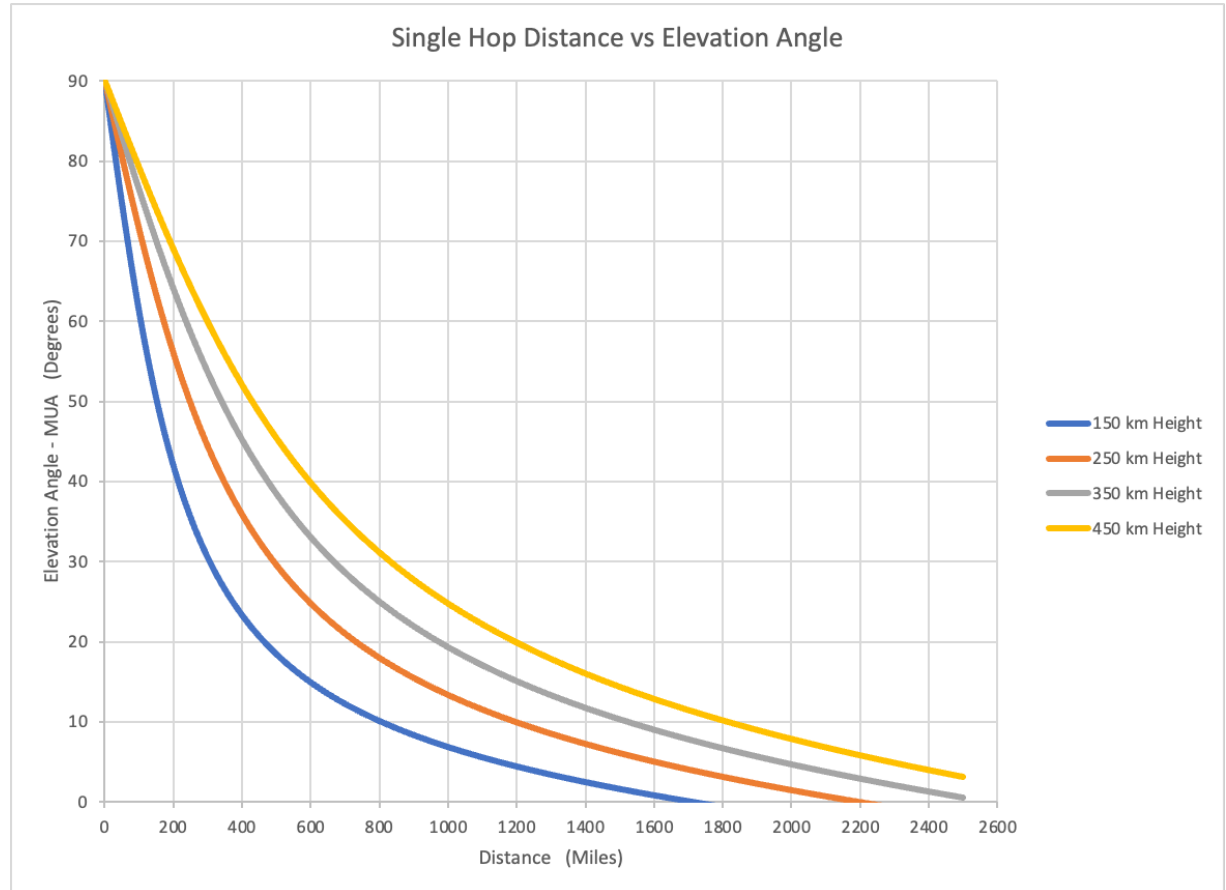
# Frequency of Optimum Transmission



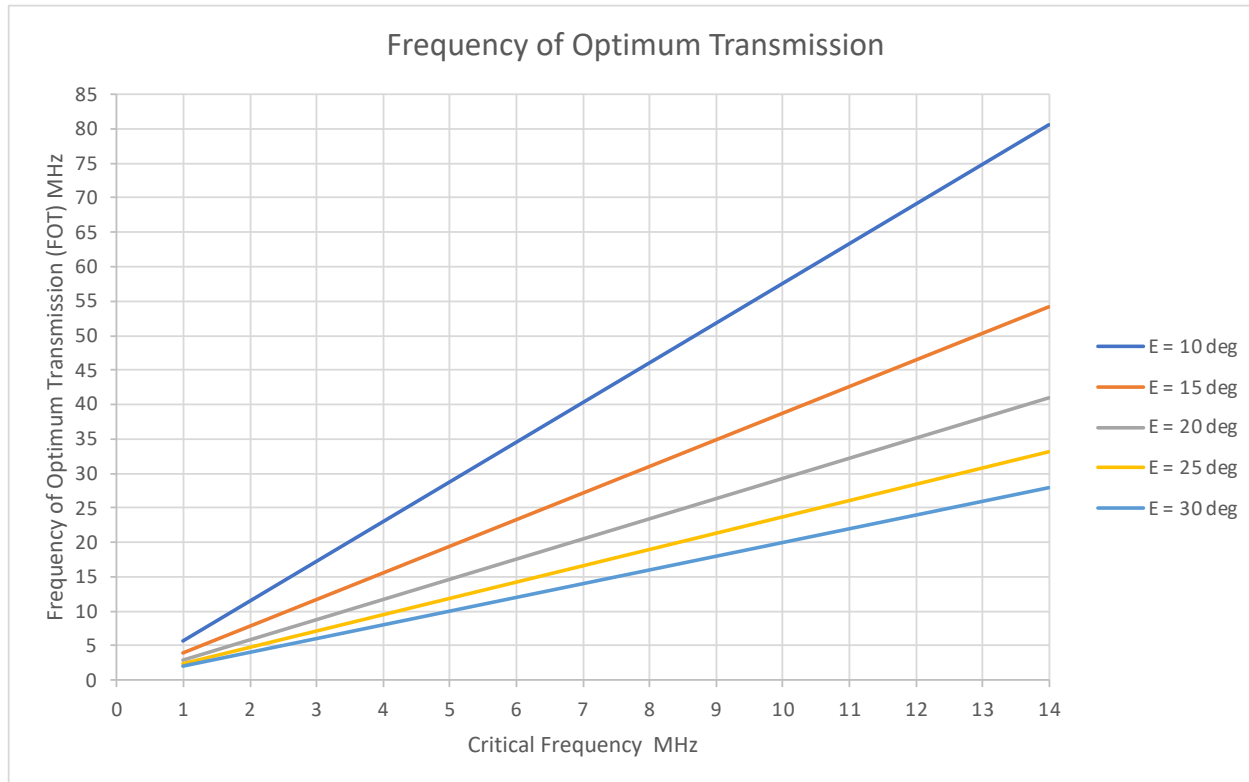
- The following steps are used to determine the Frequency of Optimum Transmission (FOT) to reach a desired destination radio station

# 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](http://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 800 miles and a F2 height of 250 km (red trace) the required angle is approximately 20°



# 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](http://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 20° (gray trace) the estimated FOT = 24 MHz