The Great Medium Wave Grey Line Challenge

11 Replies

By Jock Elliott, KB2GOM

According to https://dx.qsl.net/propagation/greyline.html: (the image above comes from them)

The "grey line" is a band around the Earth that separates daylight from darkness. Propagation along the grey line is very efficient. One major reason for this is that the D layer, The "grey line" is a band around the Earth that separates daylight from darkness. Propagation along the grey line is very efficient. One major reason for this is that the D layer, which absorbs HF signals, disappears rapidly on the sunset side of the grey line, and it has not yet built upon the sunrise side. Ham radio operators and shortwave listeners can optimize long distance communications to various areas of the world by monitoring this band as it moves around the globe. which absorbs HF signals, disappears rapidly on the sunset side of the grey line, and it has not yet built upon the sunrise side. Ham radio operators and shortwave listeners can optimize long distance communications to various areas of the world by monitoring this band as it moves around the globe.

Elliott's short version: Some funky stuff can happen with propagation when the grey line is passing through your location.

So let's have some fun for a couple of hours chasing MW DX along the grey line.

Here are the rules:

1. Frequency range is the medium wave band: 520-1710 kHz
2. From one hour before Civil Twilight **your local time** on Saturday, October 14, to one hour after Civil Twilight at your location.
3. Any radio with any antenna, but must be the radio at your location (no using remote internet radios)
4. The listener must hear the signal in real time
5. The stations must be ID'ed by listening to the signal.
6. Your report should include:
    - Your name (or Internet handle)
    - Your receiver and antenna (stay with the same setup from beginning to end; if you use multiple setups, provide a separate report for each).
    - Your location
    - The time, the frequency, and the ID of each station heard
    - The total mileage of your top five most distant stations.

A final point: this is not a contest; it is a challenge. The reward for every participant will be fun and fellowship.

ASTRONOMY

SUN	RISE	SET
Actual Time	**6:45** AM	**6:51** PM
Civil Twilight	**6:16** AM	**7:19** PM
Nautical Twilight	**5:43** AM	**7:52** PM
Astronomical Twilight	**5:10** AM	**8:25** PM
Length of Visible Light	**13** h **2** m	
Length of Day	**12** h **6** m	

Tomorrow will be **2** minutes **52** seconds shorter

You can find when Civil Twilight begins at your location by visiting www.wunderground.com . Enter your location, click on “Full Forecast” then scroll down to the “Astronomy” section.