



NARA NVIS Tests

Near Vertical Incident Skywave Tests by the Nanaimo Amateur Radio Association



The Nanaimo Amateur Radio Association invites you and your local club members to participate in its NVIS radio propagation tests on the 60m band.

Here is the essential information:

- **Date** - Sunday March 22, 2026
- **Time** - 11:30am to 2:30pm
- **Callsign** - VE7NA
- **Mode** - USB
- **Frequency** - 5.346.5 MHz (dial freq.)
(On channelized radios use 5.348 MHz)

NARA's NVIS tests on Mar. 22 allow us all to get together again on the 60m band and to test the ranges that we can achieve on the 60m band in daylight when the D-layer prevents longer distance communication.

Here is a question from the Canadian Basic exam question bank. This is Question (B-007-004-001)

What effect does the D region of the ionosphere have on lower frequency HF waves in the daytime?

A - It absorbs the waves

B - It distorts the waves

C - It bends the radio waves out into space

D - It refracts the radio waves back to Earth

The answer is A. The D-layer absorbs or attenuates low frequency HF waves when the D-layer is present during daytime. Interestingly as the wave goes up through the D-layer and also as the radio wave travels down through the D-layer back to Earth, so

absorption/attenuation is both directions.

So during Daylight, when the D-Layer is present, the ranges achieved with a 100W ERP SSB station on the 60m band is limited. Of course at night, when the D-layer is not present, ranges on the 60m band can be world wide.

The scenario for these tests is to simulate voice communication (USB) from an emergency operations centre (EOC) trying to communicate on the 60m band over several hundreds of Kilometers during daylight.

One of the reasons that the Amateur Radio Service gained the 60m band in 2002 was because these frequencies were recognized as being very useful for emergency communications.

Many amateur radio stations may not have 60m antennas but with some ingenuity amateurs should be able to load up one of their wire antennas to radiate a signal on the 60m band.

VE7NA will act as net control station for these tests and put out calls every 10 minutes or so. Please consider joining VE7NA during this three hour test window.

Any queries or reports should be sent to:

nvis@ve7na.ca

Hoping to work you on 60m

73 VE7NA (NARA)

Located on the East Coast of Vancouver Island