

30 March 2004

Sirs:

We request permission to transmit at one of the following frequencies:

151.70 MHz, 151.76 MHz, or 151.82 MHz, for the purpose of communication among weather research vehicles.

We do not have an engineering study concerning the above frequencies, but hope that the least crowded of the above can be granted.

We also request permission to transmit at one of the following frequencies:

165.435 MHz, or 165.66 MHz, for the purpose of communication among weather research vehicles.

We do not have an engineering study concerning these frequencies, but desire authorization in order to avoid any potential conflicts that may arise at an already granted 163.1 MHz. Our procedure would be to switch to one of the above frequencies if use of 163.1 MHz is interfering with other users.

During 2004, we plan to operate in the following region in support of severe weather studies:

WY, CO, NM, ND, SD, NE, KS, OK, TX, MN, IA, WI, MO, AR.

Communication on these frequencies will be sporadic and can co-exist with other users.

Background:

The Doppler On Wheels mobile weather radar vehicles (DOWs) conduct a variety of studies of severe weather and other phenomena. Nearly every spring, the DOWs operate in the Midwestern United States while studying tornadoes. In order to conduct these operations, the DOWs are placed at various locations surrounding thunderstorms, sometimes at ranges of approximately 20 km from each other. Radio communication is required among vehicles in order to coordinate deployments. The location of operations varies every day, and is unpredictable, but covers a wide range of the Midwestern United States.

DOW operations support various government grants, primarily from the National Science Foundation (NSF), but also from USDA(Forest Service), FAA, DOD, and other agencies from time to time.



A DOW in operation collecting data near a tornado in the Texas Panhandle in 2003