

# N4NRV Fox Hunt (Transmitter Hunt)

Saturday April 7th – After Dutch Treat Breakfast at Country Kitchen, Christiansburg, VA  
Foxes on 146.580 MHz and 446.000 MHz

## 1 PURPOSE

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To employ radio direction finding techniques to find a given radio transmission within a designated search area. This serves as practice to emulate real world situations where discovery of the location of a transmission would be useful. Such purposes include emergency rescue transponders, and non-authorized transmissions interfering with other communication. This will be a mobile transmitter hunt, requiring the use of automobiles for transportation.

## 2 PARTICIPANTS

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Although sponsored by the N4NRV Amateur Radio Club, this event is open to the anyone wishing to participate. Groups of individuals are encouraged to provide learning opportunities, and sharing of resources.

## 3 EQUIPMENT NEEDED

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The equipment below is suggested per team. Please bring any equipment you feel would be useful for your team.

- Automobile
- Mobile or handheld receiver allowing the reception of frequencies in the 144.0 MHz to 148.0 MHz range (2-meter band)  
*AND/OR*  
Mobile or handheld receiver allowing the reception of frequencies in the 430.0 MHz to 440.0 MHz range (70-centimeter band)
- Map (some may be available) or GPS map capability (smart phone, etc)

*Suggest:*

- Directional antenna that works with the radio for the 2-meter band
- Compass
- Pencil/Eraser for marking maps
- Smart phone application such as SigTrax (Android) or Foxhunt Pro (iPhone)

## 4 LOCATION

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Event will start directly after the N4NRV Saturday breakfast at the Christiansburg Country Kitchen restaurant. The search area for this event will be confined to the Christiansburg corporate limits.

## 5 GENERAL RULES

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*All rules subject to change due to conditions as seen necessary by the N4NRV Amateur Radio Club*

### 5.1 ALL

All Fox Hunting individuals/teams will abide by all appropriate rules of the road and be safe in all aspects of the hunt. Please be respectful to avoid private property, and keep roadways clear. Penalties for improper behavior are at the discretion of the Fox Coordinator. Conclusion of the event, or any announcements during the event shall be communicated via the N4NRV repeaters. The event will stop at 1:00pm, and participants have the option to meet at the place of origin to discuss the lessons learned and experience.

### 5.2 FOX/FOX COORDINATOR OPERATION

- The Fox Coordinator MUST announce any changes from these rules, at the start time
- The Fox will be stationary, and hidden within the confines of the Christiansburg corporate limits
- The Fox will be clearly marked and identify its purpose to bystanders
- The Fox will operate on frequency 146.580 MHz and 446.000 MHz (may be changed due to conditions/use of frequency)
- The Fox will transmitter shall cycle with a minimum of 30 seconds transmission every 2 minutes
- Transmission will consist of the transmitter ID and purpose
- Typical Fox transmits at a level below 5 watts
- Most hounds MUST be able to hear the Fox transmitter at the starting point
- The Fox Coordinator will notify the local Police Department to inform them of the club Fox hunt activities to overt any 'suspicious persons' calls

### 5.3 HOUND OPERATION

- The hound will not transmit on the same frequency as the Fox
- The hound team should monitor the N4NRV repeaters for announcements or instruction
- Announcements will be given prior to the hunt as to what will constitute a "find" of the Fox.

## 6 DEFINITIONS

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**Fox** - transmitter the hounds try to physically find

**Fox Coordinator** – person in charge of deploying and monitoring the Fox

**Hound** or **Hunter** - station trying to find the Fox

***Have fun! 73***