

# N4NRV Fox Hunt

September 24<sup>th</sup> @ 9:30am thru 1:00pm – Christiansburg, VA  
Fox on 146.580 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 radio allowing the reception of frequencies in the 144.0 MHz to 148.0 MHz range (2-meter band)
- Directional antenna that works with the radio for the 2-meter band
- Method of attenuation
- Compass
- Map (to be furnished)
- Log sheet (to be furnished)
- Pencil/Eraser for marking maps

## 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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### 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
- The Fox will transmitter shall cycle with a minimum of 30 seconds transmission every 5 minutes
- Transmission will consist of the transmitter ID and purpose
- The Fox will transmit at a level of 2 to 5 watts
- The Fox will have tags numbered in sequence for distribution to the hounds
- Most hounds at the starting point MUST be able to hear the hidden transmitter
- The Fox Coordinator will notify the local Police Department to inform them of the club Fox hunt activities in case of a 'suspicious persons' call

### 5.3 HOUND OPERATION

- The hound will not transmit on the same frequency as the Fox
- The hound team will monitor the N4NRV repeaters for announcements or instruction
- To constitute a find of the Fox, the hunter must remove a numbered tag from either the hidden transmitter, its antenna system, or other item nearby, and report in person to the Fox Coordinator. The Fox will have tags; take the lowest numbered tag. The hunter's elapsed time will include time taken to report.

## 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