



Young telegrapher David Sarnoff

**Contact Us:**

**President:** Don Corrington AK2S ak2s@arrl.net  
**Secretary:** John DeGood NU3E nu3e@arrl.net  
**Website:** n2re.org

**Other Area Amateur Radio Clubs:**

Burlington County Radio Club k2td-bcrc.org  
 Delaware Valley Radio Association w2zq.com  
 Raritan Valley Radio Club w2qw.org  
 South Jersey Radio Association sjra.org

**Reference Websites:**

**ARRL US Amateur Radio Band Plan Charts:**  
<http://www.arrl.org/graphical-frequency-allocations>

**Making Your First Contact:**  
<http://www.arrl.org/making-your-first-contact>

**ARRL "Considerate Operator's Frequency Guide":**  
<http://arrl.org/considerate-operator>

**FCC License/Call Sign Search Page:**  
<http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp>

**FCC Title 47 CFR Part 97 – Amateur Radio Service Rules and Regulations:**  
<https://www.govinfo.gov/content/pkg/CFR-2009-title47-vol5/pdf/CFR-2009-title47-vol5-part97.pdf>

Local 2 meter and 70 cm Frequencies				
Frequency	Offset	PL	Callsign	Comments
144.200	simplex			National calling frequency
146.460	1.0	131.8	N2RE	DSRC; Lawrenceville, NJ
146.520	simplex			National simplex frequency
146.625	-0.6	103.5	W2QW	RVRC; Green Brook, NJ
146.070	-0.6	131.8	W2ZQ	DVRA; West Trenton, NJ
147.300	0.6	131.8	W3BXW	Fairless Hills, PA
147.345	0.6	127.3	WA3RXW	SNJARS; Waterford Works, NJ
432.100	simplex			National calling frequency
442.650	5.0	131.8	W2ZQ	DVRA; West Trenton, NJ
446.000	simplex			National simplex frequency
449.325	-5.0	107.2	N2BEI	BEARS-DARI; Hillsborough, NJ

# David Sarnoff Radio Club

Established March 6, 1975  
 an ARRL affiliated club

<http://n2re.org>

The David Sarnoff Radio Club is a general-interest amateur radio club serving the greater Princeton, NJ area. Membership is open to anyone with an interest in amateur radio. There are no dues. To become a member, simply attend a club meeting and fill-out a membership application.

**Meeting: Third Tuesday of the month  
 7:30 PM**

**Location: American Red Cross  
 707 Alexander Rd, Suite 101  
 Princeton, NJ 08540**

**Q:** What is Amateur Radio?

**A:** Amateur Radio (Ham Radio) is a popular hobby and a service in which licensed participants operate communications equipment. Although hams get involved for many reasons, they all have in common a basic knowledge of radio technology and operating principles, and pass an examination for the FCC license to operate on radio frequencies known as the "Amateur Bands." These bands are radio frequencies reserved by the Federal Communications Commission (FCC) for use by hams at intervals from just above the AM broadcast band all the way up into extremely high microwave frequencies.

**Q:** Do I have to learn Morse Code?

**A:** While many hams like to use Morse Code, it is not required.

**Q:** How do I get started?

**A:** The Technician Class is the first level license grant; several self-study guides are available and classes are typically offered throughout the year by local clubs.

## Signal Report (RST)

"Full Quieting" is the term used for a clear voice transmission on a repeater.

An example RST report for a voice transmission is "59", usually pronounced "five nine" or "five by nine", and indicates a perfectly readable and very strong signal.

The **R** stands for "Readability". Readability is a qualitative assessment of how easy or difficult it is to correctly copy the information being sent during the transmission. In a voice transmission, readability refers to how easy or difficult it is for each spoken word to be understood correctly. Readability is measured on a scale of 1 to 5.

1. Unreadable
2. Barely readable, occasional words distinguishable
3. Readable with considerable difficulty
4. Readable with practically no difficulty
5. Perfectly readable

The **S** stands for "Strength". Strength is an assessment of how powerful the received signal is at the receiving location. Although an accurate signal strength meter can determine a quantitative value for signal strength, in practice this portion of the RST code is a qualitative assessment, often made based on the S meter of the radio receiver at the location of signal reception. "Strength" is measured on a scale of 1 to 9.

1. Faint signal, barely perceptible
2. Very weak
3. Weak
4. Fair
5. Fairly good
6. Good
7. Moderately strong
8. Strong
9. Very strong signals

The **T** stands for "Tone". Tone is only used in Morse code and digital transmissions and is therefore omitted during voice operations.

## NATO Phonetic Alphabet

<b>A</b> -- Alfa	<b>N</b> -- November
<b>B</b> -- Bravo	<b>O</b> -- Oscar
<b>C</b> -- Charlie	<b>P</b> -- Papa
<b>D</b> -- Delta	<b>Q</b> -- Quebec
<b>E</b> -- Echo	<b>R</b> -- Romeo
<b>F</b> -- Foxtrot	<b>S</b> -- Sierra
<b>G</b> -- Golf	<b>T</b> -- Tango
<b>H</b> -- Hotel	<b>U</b> -- Uniform
<b>I</b> -- India	<b>V</b> -- Victor
<b>J</b> -- Juliet	<b>W</b> -- Whiskey
<b>K</b> -- Kilo	<b>X</b> -- X-ray
<b>L</b> -- Lima	<b>Y</b> -- Yankee
<b>M</b> -- Mike	<b>Z</b> -- Zulu

An example of a phonetic pronunciation for the David Sarnoff Radio Club call sign N2RE is:

**NOVEMBER TWO ROMEO ECHO**

## Coordinated Universal Time

Coordinated Universal Time (UTC) is the time at the zero or reference meridian.

**Note:** Subtract one hour from EDT for EST

UTC	EDT	UTC	EDT	UDT	EDT
0000*	<b>2000</b>	0800	<b>0400</b>	1600	<b>1200</b>
0100	<b>2100</b>	0900	<b>0500</b>	1700	<b>1300</b>
0200	<b>2200</b>	1000	<b>0600</b>	1800	<b>1400</b>
0300	<b>2300</b>	1100	<b>0700</b>	1900	<b>1500</b>
0400	<b>0000*</b>	1200	<b>0800</b>	2000	<b>1600</b>
0500	<b>0100</b>	1300	<b>0900</b>	2100	<b>1700</b>
0600	<b>0200</b>	1400	<b>1000</b>	2200	<b>1800</b>
0700	<b>0300</b>	1500	<b>1100</b>	2300	<b>1900</b>

\* 0000 and 2400 are interchangeable. (0000 with the day just starting; 2400 is associated with the date of the day ending.)

## Technician Class License Privileges

### US Amateur Transmitter Power Limits

At all times, transmitter power must be the minimum necessary to carry out the desired communications. Unless otherwise noted, the maximum power output is 1500 watts PEP. Novice/Technicians are limited to 200 watts PEP on HF bands. Geographical power restrictions apply to the 70 cm, 33 cm and 23 cm bands; see *The FCC Rule Book* for details.

### 80 Meters

3.525-3.600 MHz: CW Only

### 40 Meters

7.025-7.125 MHz : CW only

### 15 Meters

21.025-21.200 MHz: CW Only

### 10 Meters

28.000-28.300 MHz: CW, RTTY/Data -- Max 200 W PEP  
28.300-28.500 MHz: CW, Phone -- Max 200 W PEP

### 6 Meters

50.0-50.1 MHz: CW Only  
50.1-54.0 MHz: CW, Phone, Image, MCW, RTTY/Data

### 2 Meters

144.0-144.1 MHz: CW Only  
144.1-148.0 MHz: CW, Phone, Image, MCW, RTTY/Data

### 1.25 Meters

222.00-225.00 MHz: CW, Phone, Image, MCW, RTTY/Data

### 70 Centimeters

420.0-450.0 MHz: CW, Phone, Image, MCW, RTTY/Data

### 33 Centimeters

902.0-928.0 MHz: CW, Phone, Image, MCW, RTTY/Data

### 23 Centimeters

1240-1300 MHz: CW, Phone, Image, MCW, RTTY/Data