

## Technician Study Guide 2014

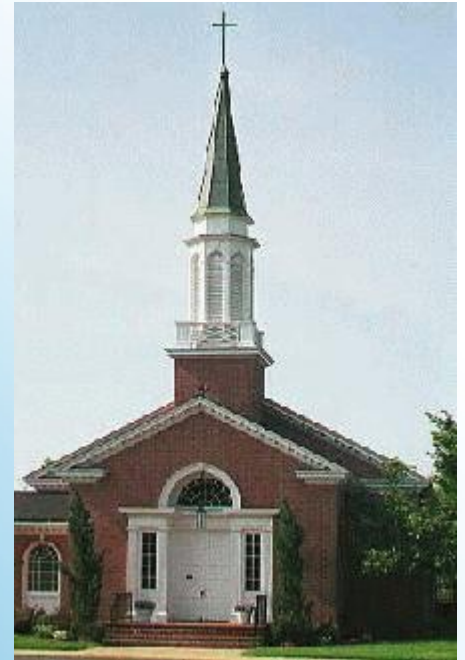
These slides were created  
by  
Henry, K2BFY, JAN 2013  
For  
The Loudoun Amateur Radio Group  
K4LRG  
[www.k4lrg.org](http://www.k4lrg.org)

# Technician License Study Help

# LOUDOUN AMATEUR RADIO GROUP

The Loudoun Amateur Radio Group  
(LARG) meets  
On 3<sup>rd</sup> Saturdays, 0830  
at  
Holy Trinity Lutheran Church  
605 W. Market Street  
Leesburg VA

Notes: Use the far left side door.  
The March meeting is on the 2<sup>nd</sup> Saturday



# LOUDOUN AMATEUR RADIO GROUP

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The Loudoun Amateur Radio  
Group

Website is: [www.k4lrg.org](http://www.k4lrg.org)

Yahoo group is: **l\_a\_r\_g**

Call sign is: **K4LRG**

Weekly 2m nets are on

Sunday at 2030 on

145.310 PL 77 or 146.700



# LOUDOUN AMATEUR RADIO GROUP

The Loudoun Amateur Radio Group of Loudoun County in Northern Virginia, founded in July 1993, is a family oriented club with a wide variety of activities and interests including public service, emergency communications support, fox hunts, contesting and DX-ing. Our premier events are the annual K4LRG operation in the June ARRL Field Day, the Reston Century Ride Operation in August, Lovettsville Oktoberfest in September, and Leesburg Air Show in October. We are an affiliated club of the American Radio Relay League and many of our members support the Amateur Radio Emergency Service of Loudoun County. We encourage advancement in the art of amateur radio communications and offer several training courses each year. You are welcome to join us in some of our many activities.



# LOUDOUN AMATEUR RADIO GROUP

# Study Guidelines

- No Nonsense Study Guide  
<http://www.kb6nu.com/tech-manual/>
- Take practice exams online. See the list below
- Do practice exams until your score is 100%
- Learn the correct answers only
- Do not study the incorrect answers
- See also: [www.eham.net](http://www.eham.net),  
[hamstudy.org](http://hamstudy.org),  
[www.qrz.com](http://www.qrz.com),  
[www.kb6nu.com](http://www.kb6nu.com),  
[www.hamradioinstructor.com](http://www.hamradioinstructor.com),  
[aa9pw.com/radio/](http://aa9pw.com/radio/)

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# Technician License Study Help

## The Amateur Radio *Service*

- ◆ The key word is *Service*

Radio Amateurs perform the following public services:

- ◆ Participate in public service events
- ◆ Provide emergency communications
- ◆ Serve the community, state and country
- ◆ Not a personal, family or business communications service
- ◆ Design and develop radio systems and communication methods
- ◆ Develop new communications technology
- ◆ Only service that is allowed to build their own transmitters
- ◆ First Satellite to Satellite communications link in history was between two amateur radio satellites

All citizens of the USA are eligible to become  
Amateur Radio Licensees

Veronica Harrington, KC6TQR, got her first license at age 5

Henry Weidman, K2BFY, was first licensed in 1957 at age 14  
because he was not as smart as KC6TQR

Note: There are no age limits for licensees

**Technician License Study Help**

## The FCC ULS Database

- ◆ [wireless.fcc.gov](https://wireless.fcc.gov) or search for FCC ULS
- ◆ Get a FRN number
- ◆ Before using ULS, you must first register with the FCC's Commission Registration System (CORES) to receive an FCC Registration Number (FRN). Note: ULS requires you use your FRN and password as your login.



## Universal Licensing System

[FCC](#) > [WTB](#) > ULS Home

[FCC Site Map](#)

Search the FCC:

[Help](#) - [Advanced](#)



### ULS Home

- [About ULS](#)
- [FAQ](#)
- [Radio Services](#)
- [Filing Purposes](#)
- [Batch Filing](#)
- [Releases](#)
- [Weekly Status Public Notices](#)
- [Unlicensed Wireless Mics PN Report](#)
- [Daily Transaction Files](#)
- [Databases](#)
- [Processing Utilities](#)
- [Public Safety and Homeland Security Bureau](#)
- [ULS Site Map](#)

### ULS Online Systems

All applications are operating properly.

#### NEW USERS

**REGISTER**

To use the FCC Online Systems, you first need to register with the FCC.

[Learn more](#)

#### ONLINE FILING

**LOG IN**

Apply for a new license, renew, modify, assign authorization, transfer control, manage licenses and applications, associate call sign(s) and more.

[Forgot Password?](#)

#### SEARCH

**LICENSES**

Find licenses across all services.

**APPLICATIONS**

Find applications.

**ARCHIVES**

Find archived licenses using the **enhanced** license archive search.

#### QUICK LINKS

##### Help

[Contact Us](#)

##### Systems

- [Pay Fees](#)
- [Antenna Structure Registration \(ASR\)](#)
- [TOWAIR](#)
- [TCNS/E-106](#)
- [Submit a Pleading](#)
- [Hearing Aid Compatibility Status Reporting](#)

### Alerts

**No Active Alerts**

[More Alerts](#)

### Downtime Schedule

No downtimes scheduled, with the exception of the Daily downtimes.

[Daily](#): 12 Midnight - 2 AM ET

# Technician License Study Help

## Exam Elements

- T1 - FCC Rules, descriptions and definitions for the amateur radio service, operator and station license responsibilities - [6 Questions]
- T2 - Operating Procedures - [3 Questions]
- T3 - Radio wave characteristics, radio and electromagnetic properties, propagation modes [3 Questions]
- T4 - Amateur radio practices and station setup [2 Questions]
- T5 - Electrical principles, math for electronics, electronic principles, Ohms Law [4 Questions]
- T6 - Electrical components, semiconductors, circuit diagrams, component functions [4 Questions]
- T7 - Station equipment, common transmitter and receiver problems, antenna measurements and troubleshooting, basic repair and testing [4 Questions]
- T8 - Modulation modes, amateur satellite operation, operating activities, non-voice communications [4 Exam Questions]
- T9 - Antennas, feed lines [2 Questions]
- T0 - AC power circuits, antenna installation, RF hazards [3 Questions]

# Technician License Study Help

## Class Description

- The licensing class prepares students to pass the FCC Technician Class License exam
- Times for the class are: Saturday 0800 to 1700, Sunday 0800 to 1200, Exam Sunday at about 1300
- Coffee and donuts will be provided in the morning and a light lunch at noon for \$5 per day per student
- Students should review the No Nonsense Study Guide and take practice exams before the class

**Technician License Study Help**