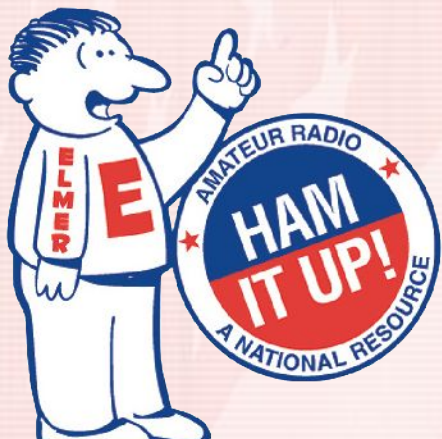


Technician Licensing Class

Presented by

Ryan Caron
NX1U



TECHNICIAN CLASS GENERAL CLASS EXTRA CLASS

TECHNICIAN CLASS

FCC Element 2 Amateur Radio License Preparation



Contains the complete 394-question FCC Element 2 question pool effective July 1, 2010 to June 30, 2014
by GORDON WEST, WB6NQA



- Fully Illustrated Text: Aids Learning
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Amateur Radio Technician Class Element 2 Course Presentation

➤ **ELEMENT 2 SUB-ELEMENTS** (Groupings)

- **About Ham Radio**
- **Call Signs**
- **Control**
- **Mind the Rules**
- **Tech Frequencies**
- **Your First Radio**
- **Going On The Air!**
- **Repeaters**
- **Emergency!**
- **Weak Signal Propagation**

Amateur Radio Technician Class Element 2 Course Presentation

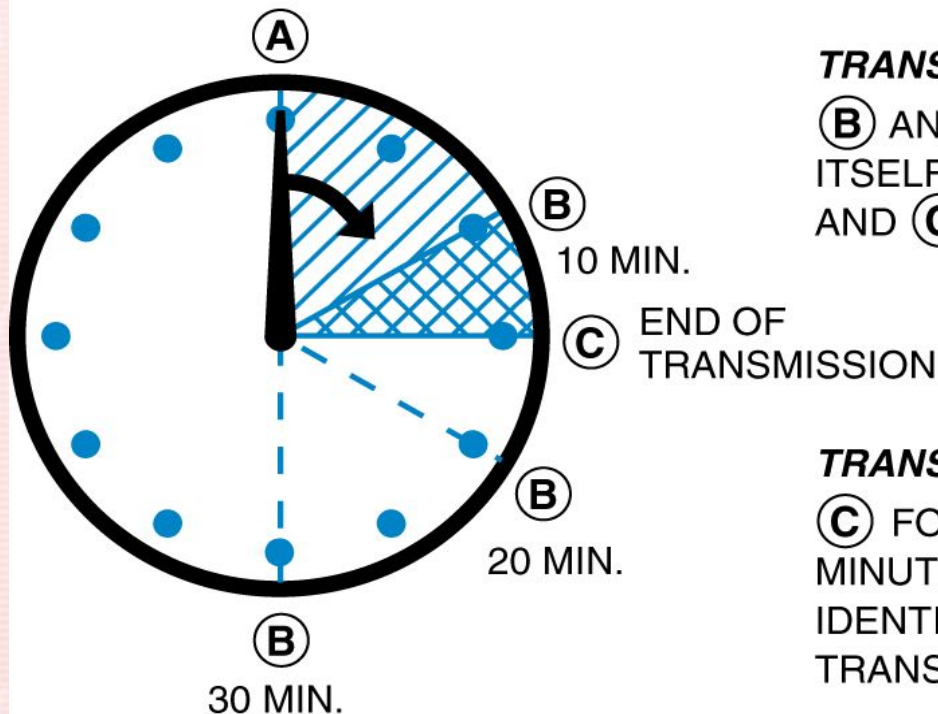
➤ **ELEMENT 2 SUB-ELEMENTS** (Groupings)

- **Talk to Outer Space!**
- **Your Computer Goes Ham Digital!**
- **Multi-Mode Radio Excitement**
- **Run Some Interference Protection**
- **Electrons - Go With the Flow!**
- **It's the Law, per Mr. Ohm!**
- **Go Picture These!**
- **Antennas**
- **Feed Me with Some Good Coax!**
- **Safety First!**

Call Signs

T1F3 An amateur station is required to transmit its assigned call sign at least every 10 minutes during and at the end of a contact.

(A) START OF TRANSMISSION—EVEN THOUGH IT IS NOT REQUIRED, MOST HAMS IDENTIFY THEIR STATION AT THE START OF A TRANSMISSION.



TRANSMISSIONS LONGER THAN 10 MINUTES:
(B) AN AMATEUR STATION MUST IDENTIFY ITSELF EVERY 10 MINUTES OF TRANSMISSION, AND (C) AT THE END OF A TRANSMISSION.

TRANSMISSIONS LESS THAN 10 MINUTES:
(C) FOR TRANSMISSIONS LESS THAN 10 MINUTES, THE AMATEUR STATION MUST IDENTIFY ITSELF AT THE END OF THE TRANSMISSION.

Call Signs

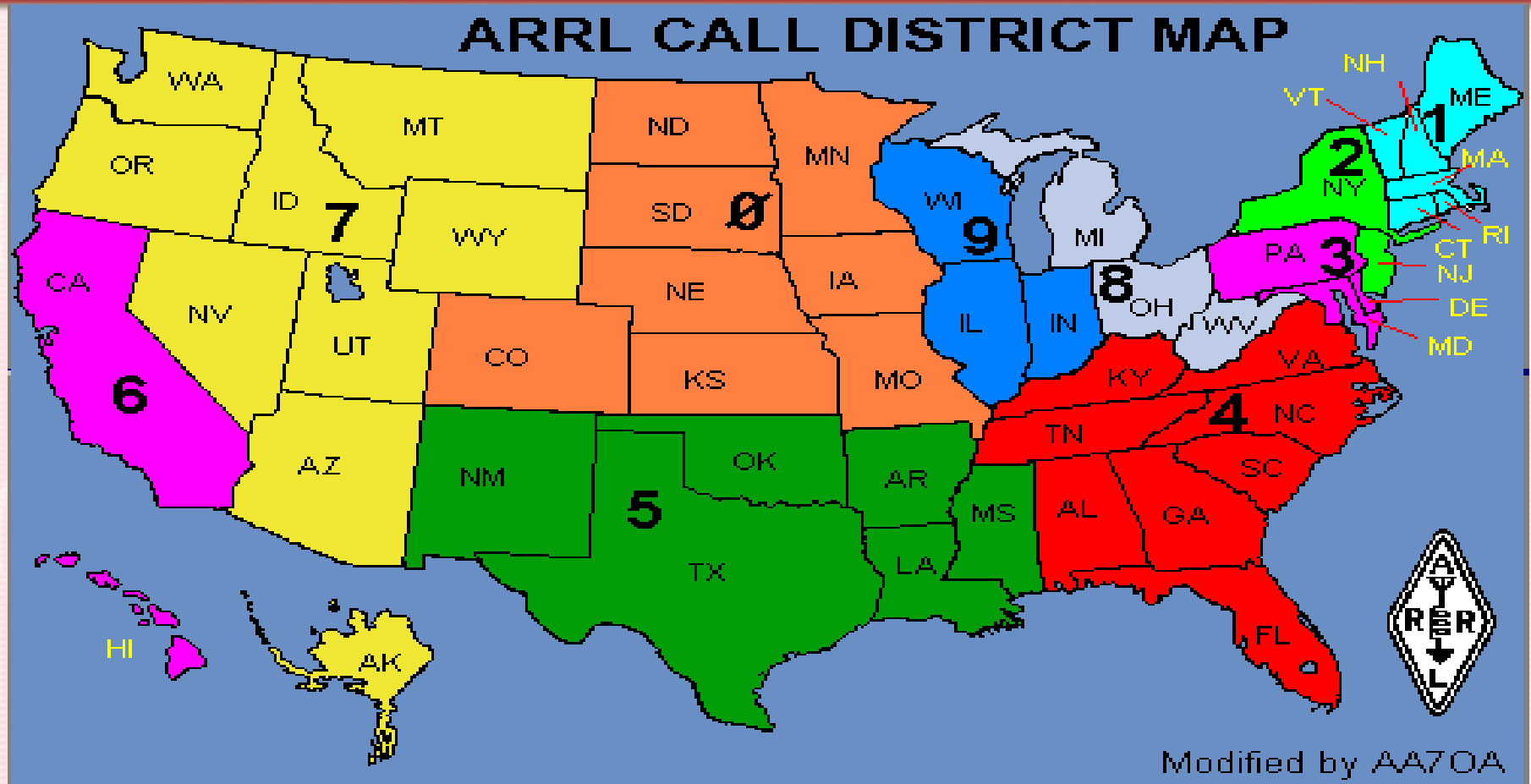
- T1C2 W3ABC is a valid US amateur radio station call sign.



Amateur Radio call sign on license plates.

Ham radio call signs, for the U.S, begin with A, K, N, or W. They also have a single numbers 0 through 9.

Call Signs



The number in your new call sign is determined by your permanent mailing address.

Call Signs

- T2B9 Use of a phonetic alphabet is the method encouraged by the FCC when identifying your station when using phone.

A Alpha

B Bravo

C Charlie

D Delta

E Echo

F Foxtrot

G Golf

Call Signs

- T1C1 A call sign that has a single letter in both the prefix and suffix is used for a Special Event.

• W5P

N8C

K3M

- T8C6 The purpose of a temporary "1 by 1" format (letter-number-letter) assigned call sign is for operations in conjunction with an activity of special significance to the amateur community.
- T1F12 At least 4 persons are required to be members of a club for a club station license to be issued by the FCC.

Call Signs

- T1F1 The type of identification being used when identifying a station on the air as “Race Headquarters” is a Tactical call.
 - Tactical call signs ARE permitted as long as they don't sound like a US or foreign call sign.



- T1F2 When using tactical identifiers you must transmit your station's FCC-assigned call sign every ten minutes.

Call Signs

- T1F4 Phone emission in the English language is an acceptable method of station identification when operating in the phone sub-band.



Testing your radio?
Give your call sign
in English.

- T1F6 KL7CC stroke W3, KL7CC slant W3 and KL7CC slash W3 are acceptable formats of self-assigned indicators when identifying using a phone transmission.

- KL7CC/W3 ... Stroke
- KL7CC/W3 ... Slant
- KL7CC/W3 ... Slash

All of these choices are
correct.

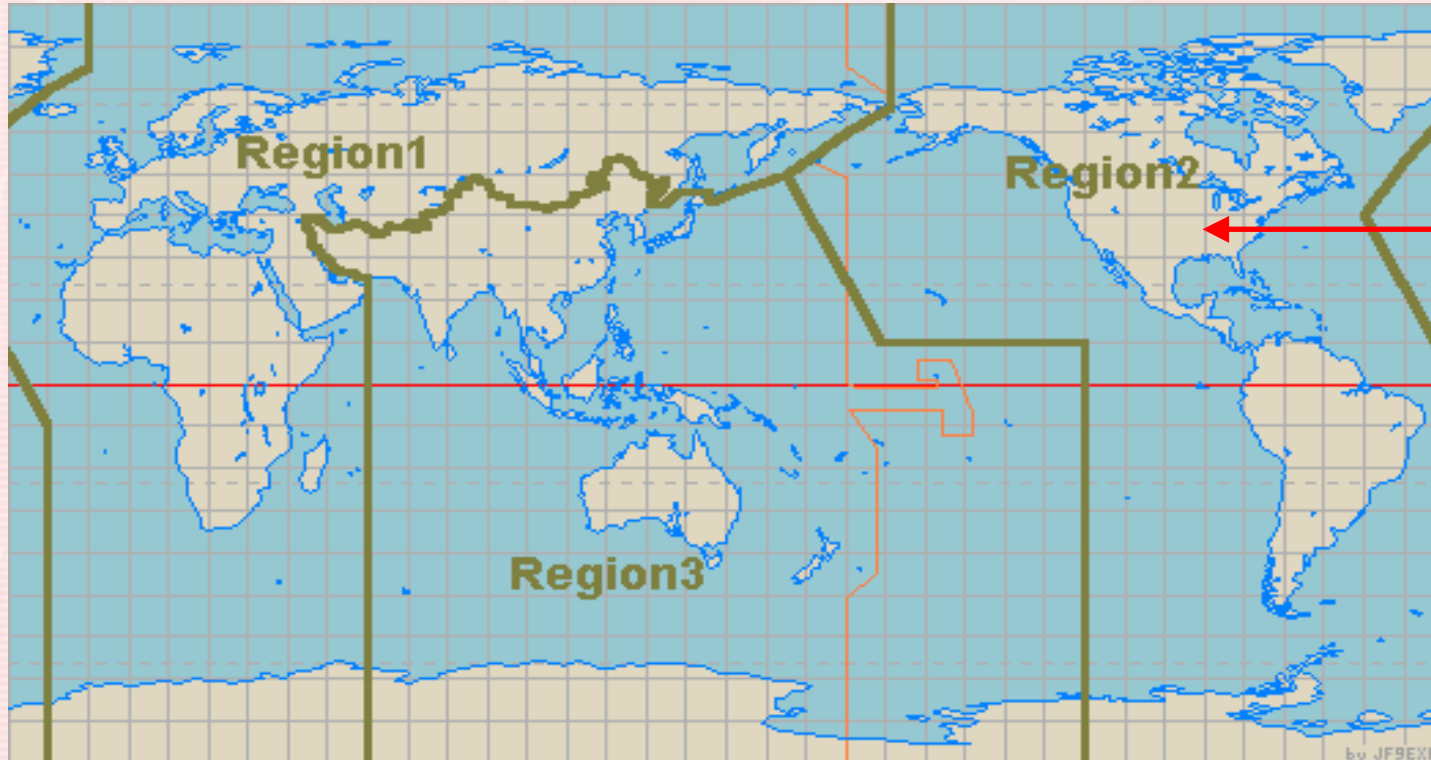
Call Signs

- T1F7 When appending a self-assigned call sign indicator there are restrictions. It must not conflict with any other indicator specified by the FCC rules or with any call sign prefix assigned to another country.
- T1B1 The ITU (International Telecommunications Union) is a United Nations agency for information and communication technology issues.



Call Signs

- T1B2 North American amateur stations are located in ITU Region 2



North
America
ITU
Region 2

Call Signs

- T1C3 Communications incidental to the purposes of the amateur service and remarks of a personal character are types of international communications permitted by an FCC-licensed amateur station.
- T1D1 FCC-licensed amateur are prohibited from exchanging communications with any country whose administration has notified the ITU that it objects to communications with FCC-licensed amateur stations.
- T1F11 FCC rules authorize the transmission of non-emergency third party communications to foreign stations whose government permits such communications

Call Signs

- T1C6 In addition to places where the FCC regulates communications, an FCC-licensed amateur station can transmit from any vessel or craft that is documented or registered in the United States.
- T1C4 You are allowed to operate your amateur station in a foreign country when the foreign country authorizes it.
- T1D2 Only during an Armed Forces Day Communications Test may an FCC-licensed amateur station exchange messages with a U.S. military station.

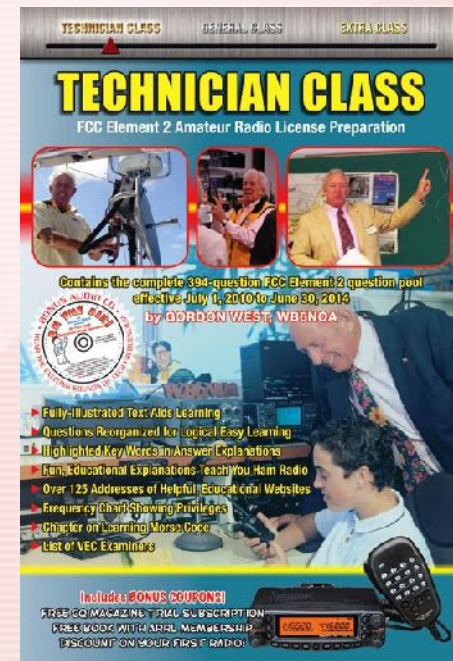
Element 2 Technician Class Question Pool

Call Signs

Valid July 1, 2010

Through

June 30, 2014



T1F03 When is an amateur station required to transmit its assigned call sign?

- A. At the beginning of each contact, and every 10 minutes thereafter
- B. At least once during each transmission
- C. At least every 15 minutes during and at the end of a contact
- D. At least every 10 minutes during and at the end of a contact

T1C02 Which of the following is a valid US amateur radio station call sign?

- A. KMA3503
- B. W3ABC
- C. KDKA
- D. 11Q1176

T2B09

Which of the following methods is encouraged by the FCC when identifying your station when using phone?

- A. Use of a phonetic alphabet
- B. Send your call sign in CW as well as voice
- C. Repeat your call sign three times
- D. Increase your signal to full power when identifying

T1C01 Which type of call sign has a single letter in both the prefix and suffix?

- A.** Vanity
- B.** Sequential
- C.** Special event
- D.** In-memoriam

T8C06 For what purpose is a temporary "1 by 1" format (letter-number-letter) call sign assigned?

- A.** To designate an experimental station
- B.** To honor a deceased relative who was a radio amateur
- C.** For operations in conjunction with an activity of special significance to the amateur community
- D.** All of these choices are correct

T1F12

How many persons are required to be members of a club for a club station license to be issued by the FCC?

- A. At least 5
- B. At least 4
- C. A trustee and 2 officers
- D. At least 2

T1F01 What type of identification is being used when identifying a station on the air as “Race Headquarters”?

- A.** Tactical call
- B.** Self-assigned designator
- C.** SSID
- D.** Broadcast station

T1F02 When using tactical identifiers, how often must your station transmit the station's FCC-assigned call sign?

- A.** Never, the tactical call is sufficient
- B.** Once during every hour
- C.** Every ten minutes
- D.** At the end of every communication

T1F04

Which of the following is an acceptable method of station identification when operating in the phone sub-band?

- A. Any language recognized by the United Nations
- B. Any language recognized by the ITU
- C. The English language
- D. English, French, or Spanish

T1F06

Which of the following formats of a self-assigned indicator is acceptable when identifying using a phone transmission?

- A. KL7CC stroke W3
- B. KL7CC slant W3
- C. KL7CC slash W3
- D. All of these choices are correct

T1F07

Which of the following restrictions apply when appending a self-assigned call sign indicator?

- A. It must be more than three letters and less than five letters
- B. It must be less than five letters
- C. It must start with the letters AA through AL, K, N, or W and be not less than two characters or more than five characters in length
- D. It must not conflict with any other indicator specified by the FCC rules or with any call sign prefix assigned to another country

T1B01 What is the ITU ?

- A. An agency of the United States Department of Telecommunications Management
- B. A United Nations agency for information and communication technology issues
- C. An independent frequency coordination agency
- D. A department of the FCC

T1B02 North American amateur stations are located in which ITU region?

- A.** Region 1
- B.** Region 2
- C.** Region 3
- D.** Region 4

T1C03 What types of international communications are permitted by an FCC-licensed amateur station?

- A. Communications incidental to the purposes of the amateur service and remarks of a personal character
- B. Communications incidental to conducting business or remarks of a personal nature
- C. Only communications incidental to contest exchanges, all other communications are prohibited
- D. Any communications that would be permitted on an international broadcast station

T1D01 With which countries are FCC-licensed amateur stations prohibited from exchanging communications?

- A.** Any country whose administration has notified the ITU that it objects to such communications
- B.** B. Any country whose administration has notified the United Nations that it objects to such communications
- C.** C. Any country engaged in hostilities with another country
- D.** D. Any country in violation of the War Powers Act of 1934

T1F11

To which foreign stations do the FCC rules authorize the transmission of non-emergency third party communications?

- A.** Any station whose government permits such communications
- B.** Those in ITU Region 2 only
- C.** Those in ITU Regions 2 and 3 only
- D.** Those in ITU Region 3 only

T1C06 From which of the following may an FCC-licensed amateur station transmit, in addition to places where the FCC regulates communications?

- A.** From within any country that belongs to the International Telecommunications Union
- B.** From within any country that is a member of the United Nations
- C.** From anywhere within in ITU Regions 2 and 3
- D.** From any vessel or craft located in international waters and documented or registered in the United States

T1C04 When are you allowed to operate your amateur station in a foreign country?

- A. When the foreign country authorizes it
- B. When there is a mutual agreement allowing third party communications
- C. When authorization permits amateur communications in a foreign language
- D. When you are communicating with non-licensed individuals in another country

T1D02

On which of the following occasions may an FCC-licensed amateur station exchange messages with a U.S. military station?

- A. During an Armed Forces Day Communications Test
- B. During a Memorial Day Celebration
- C. During an Independence Day celebration
- D. During a propagation test