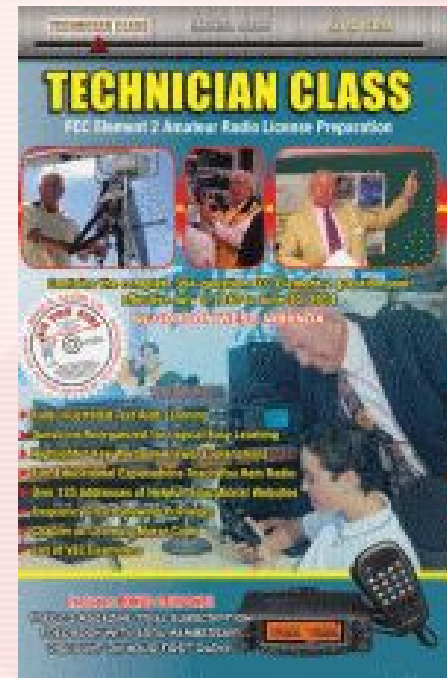


Technician Licensing Class

Emergency!

Presented by



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!**

Emergency!

- T2C6 Common practice during net operations to get the immediate attention of the net control station when reporting an emergency is to begin your transmission with “Priority” or “Emergency” followed by your call sign.



Another way to interrupt a conversation to signal a distress call is to say the word “BREAK” several times to indicate a priority or emergency distress call.

Emergency!

- T2C9 When normal communications systems are not available, an amateur station may use any means of radio communications at its disposal for essential communications in connection with immediate safety of human life and protection of property.
 - *in an emergency, anything goes!*



Amateur radio operators are well known for their volunteer assistance in emergencies—from local problems to national disasters like 9/11 and Hurricanes Katrina and Rita.

Emergency!

- T2C7 In order to minimize disruptions to an emergency traffic net once you have checked in, do not transmit on the net frequency until asked to do so by the net control station.
- T2C1 FCC rules apply to proper operation of your station when using amateur radio at the request of public service officials.
 - Amateur radio operators are not relieved from FCC rules at request from FBI, FEMA, or any other Federal agency.

- T2C5 Radio Amateur Civil Emergency Service (RACES) is a radio service using amateur stations for emergency and civil defense communication



RACES

...division of the civil defense organization that uses ham stations for emergency and CD communications



Emergency!

- T2C4 Both RACES (Radio Amateur Civil Emergency Service) and ARES (Amateur Radio Emergency Service) organizations may provide communications during emergencies.



RACES



ARES



In an emergency, authorized hams participating in a RACES organization may communicate from a police helicopter.

Emergency!

- T2C10 In a formal traffic message the information needed to track the message as it passes through the amateur radio traffic handling system is called the preamble.
 - Keep track of emergency messages as they pass through the well structured amateur radio traffic-handling system.



Hams are well known for their work with the Red Cross, Salvation Army, and others providing emergency communications.

Emergency!

- T2C8 Passing messages exactly as written, spoken or as received is usually considered to be the most important job of an amateur operator when handling emergency traffic messages.

- Write in block letters, word for word

THE AMERICAN RADIO RELAY LEAGUE							
RADIOGRAM							
VIA AMATEUR RADIO							
NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE
TO					THIS RADIO MESSAGE WAS RECEIVED AT		
TELEPHONE NUMBER					AMATEUR STATION _____ PHONE _____		
_____					NAME _____		
_____					STREET ADDRESS _____		
_____					CITY, STATE, ZIP _____		
_____					_____		
_____					_____		
_____					_____		
_____					_____		
_____					_____		
_____					_____		
REC'D		FROM	DATE	TIME	SENT TO		DATE
THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR, WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH, MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING. NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM ARR, HEADQUARTERS, 225 MAIN STREET, NEWINGTON, CT 06111					THE AMERICAN RADIO RELAY LEAGUE, INC. IS THE NATIONAL MEMBERSHIP SOCIETY OF LICENSED HAMILIANS AND THE PUBLISHER OF QST MAGAZINE. ONE OF ITS FUNCTIONS IS PROMOTION OF PUBLIC SERVICE COMMUNICATION AMONG AMATEUR OPERATORS. TO THAT END, THE LEAGUE HAS ORGANIZED THE NATIONAL TRAFFIC SYSTEM FOR DAILY NATIONWIDE MESSAGE HANDLING.		
					PRINTED IN USA		

Emergency!

- T2C11 The term "check" in reference to a formal traffic message is a count of the number of words or word equivalents in the text portion of the message.
 - include a 'check' to make sure **all words in a message** indeed were received in their entirety.

When you're working emergency traffic, it's important to make sure every word and number is passed along just as you received it. A "check" helps assure accuracy.



Element 2 Technician Class Question Pool

Emergency!

Valid July 1, 2010

Through

June 30, 2014



The image shows the cover of a book titled 'TECHNICIAN CLASS' in large yellow letters. Below the title, it says 'FCC Element 2 Amateur Radio License Preparation'. The author's name, 'by GORDON WEST, WB6NQA', is at the bottom. The cover features several photos of people in radio-related settings. A list of features is provided in a red-bordered box, including 'Fully Illustrated Text: Aids Learning', 'Questions Reorganized for Logical Easy Learning', 'Highlighted Key Words in Answer Explanations', 'Fun! Quizzical Explanations: Teach You Ham Radio', 'Over 125 Addresses of Helpful Educational Websites', 'Frequency Chart Showing Privileges', 'Chapter on Learning Morse Code', and 'List of VEC Examiners'. At the bottom, there is a section for 'BONUS COUPONS' including a 'FREE QSO MAGAZINE TRIAL SUBSCRIPTION', 'FREE BOOK WITH ANNUAL MEMBERSHIP', and 'DISCOUNT ON YOUR FIRST RADIO!'. A radio is shown in the bottom right corner.

T2C06

the net control

Which of the following is common practice during net operations to get the immediate attention of station when reporting an emergency?

- A. Repeat the words SOS three times followed by the call sign of the reporting station
- B. Press the push-to-talk button three times
- C. Begin your transmission with "Priority" or "Emergency" followed by your call sign
- D. Play a pre-recorded emergency alert tone followed by your call sign

T2C09

When may an amateur station use any means of radio communications at its disposal for essential communications in connection with immediate safety of human life and protection of property?

- A. Only when FEMA authorizes it by declaring an emergency
- B. When normal communications systems are not available
- C. Only when RACES authorizes it by declaring an emergency
- D. Only when authorized by the local MARS program director

T2C07 What should you do to minimize
disruptions to an emergency
traffic net once you have checked in?

- A.** Whenever the net frequency is quiet, announce your call sign and location
- B.** Move 5 kHz away from the net's frequency and use high power to ask other hams to keep clear of the net frequency
- C.** Do not transmit on the net frequency until asked to do so by the net control station
- D.** Wait until the net frequency is quiet, then ask for any emergency traffic for your area

12001 What set of rules applies to proper operation of your station when using amateur radio at the request of public service officials?

- A. RACES Rules
- B. ARES Rules
- C. FCC Rules
- D. FEMA Rules

T2C05 What is the Radio Amateur Civil Emergency Service?

- A. An emergency radio service organized by amateur operators
- B. A radio service using amateur stations for emergency management or civil defense communications
- C. A radio service organized to provide communications at civic events
- D. A radio service organized by amateur operators to assist non-military persons

T2C04 What do RACES and ARES have in common?

- A. They represent the two largest ham clubs in the United States
- B. Both organizations broadcast road and weather traffic information
- C. Neither may handle emergency traffic supporting public service agencies
- D. Both organizations may provide communications during emergencies

T2C10
traffic

What is the preamble in a formal message?

- A. The first paragraph of the message text
- B. The message number
- C. The priority handling indicator for the message
- D. The information needed to track the message as it passes through the amateur radio traffic handling system

12000 What is usually considered to be the most important job of an amateur operator when handling emergency traffic messages?

- A. Passing messages exactly as written, spoken or as received
- B. Estimating the number of people affected by the disaster
- C. Communicating messages to the news media for broadcast outside the disaster area
- D. Broadcasting emergency information to the general public

12011 What is meant by the term "check" in reference to a formal traffic message?

- A. The check is a count of the number of words or word equivalents in the text portion of the message
- B. The check is the value of a money order attached to the message
- C. The check is a list of stations that have relayed the message
- D. The check is a box on the message form that tells you the message was received