

Radio Merit Badge

Module 3



K2B5A



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _




Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card



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Participant Name Joe Scout
 Operator Signature Harry Ham

JAMBOREE CONTACT LOG

Date	Time UTC		Frequency (MHZ)	Mode	Station Called/Worked	Report		Remarks
	Start	Finish				Sent	Rec'd	
7/24/17	15:50	16:00	14.275	SSB	W1AW	59	57	ARRL Headquarters Station! Albany, New York
7/24/17	16:10	16:12	14.310	SSB	K2MHE	58	59	



2017 National Scout Jamboree
 July 19-28



contact!

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2017 National Scout Jamboree
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QRN Are you being interfered with? / I am being interfered with
 QSB Are you troubled by static? / I am troubled by static
 QSL Is my signal fading? / Your signal is fading
 QSO Can you acknowledge receipt? / I am acknowledging receipt
 QTH What is your position (location)? / My position (location) is ...
 CQ Looking for contacts (example: "CQ CQ from K2BSA")
 73 Best Regards


Signal Reports, RS: R=1-5, Readability; S=1-9 Signal Strength

Suggested Discussion Topics

- Where do you live?
- What are your hobbies?
- What ham radio activities do engage in?
- What are your favorite sport teams?
- Were you (or Are you) involved in Scouting? in what capacity?
- What is your favorite thing to do outside of ham radio?
- What is your favorite car?
- Do you have any pets? What kind(s)?
- What is your favorite food?
- What do you like to do for entertainment?
- Do you take vacation? What is your favorite vacation location?
- Are you a member of a ham radio club?
- Where is your home located?
- Have you lived in other states/countries? Which ones?
- What is your favorite movie?
- What is your favorite TV show?
- Do you do any type of camping?
- What outdoor activities to you like?
- Do you have any children? Grandchildren?
- What is your favorite type of vehicle (car/truck, etc.)?

The Phonetic Alphabet

Alpha	Juliet	Sierra
Bravo	Kilo	Tango
Charlie	Lima	Uniform
Delta	Mike	Victor
Echo	November	Whiskey
Foxtrot	Oscar	X-ray
Golf	Papa	Yankee
Hotel	Quebec	Zulu
India	Romeo	



"Kilo Two Bravo Sierra Alpha"



K2BSA



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station
- Talk with the other radio station operator



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station
- Talk with the other radio station operator
 - Relax and have fun



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station
- Talk with the other radio station operator
 - Relax and have fun
 - Give FIRST name ONLY



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station
- Talk with the other radio station operator
 - Relax and have fun
 - Give FIRST name ONLY
 - Tell where you live



Contact!

Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station
- Talk with the other radio station operator
 - Relax and have fun
 - Give FIRST name ONLY
 - Tell where you live
 - Describe your school



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station
- Talk with the other radio station operator
 - Relax and have fun
 - Give FIRST name ONLY
 - Tell where you live
 - Describe your school
 - Talk about Scouting



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station
- Talk with the other radio station operator
 - Relax and have fun
 - Give FIRST name ONLY
 - Tell where you live
 - Describe your school
 - Talk about Scouting
- Use Q-signals



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station
- Talk with the other radio station operator
 - Relax and have fun
 - Give FIRST name ONLY
 - Tell where you live
 - Describe your school
 - Talk about Scouting
- Use Q-signals
- Log your contact on card



Req. 9.a.(6): 10-Minute Real or Simulated Contact **PREPARATION** _

- Use the K2BSA Operating Card
- Listen and call another ham radio station
- Talk with the other radio station operator
 - Relax and have fun
 - Give FIRST name ONLY
 - Tell where you live
 - Describe your school
 - Talk about Scouting
- Use Q-signals
- Log your contact on card
- Be prepared to talk about it wh



Q-Signals

QRM



Req. 9.a.(3): Q-signals and Terms

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Q-Signals

QRN



Req. 9.a.(3): Q-signals and Terms

K2B5A



Q-Signals

QRP

Req. 9.a.(3): Q-signals and Terms



K2B5A



Q-Signals

QTH

Req. 9.a.(3): Q-signals and Terms



K2B5A



Q-Signals

QSL

Req. 9.a.(3): Q-signals and Terms



K2BSA



Q-Signals

QSL

Req. 9.a.(3): Q-signals and Terms



Radio Station Visit: What did you see?

- What is the purpose of the Radio Station?
- What equipment did you see?
- How was the equipment used?
- What types of licenses are required to use the and maintain the equipment?

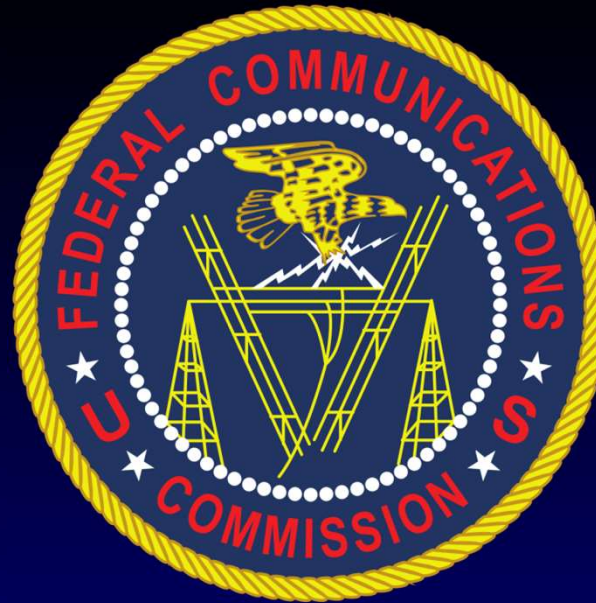
Req. 7: Visit a radio installation



K2B5A



Req. 9.a.(1): Amateur Radio Service



AMATEUR RADIO SERVICE

SLIDE 5 **5**

K2B5A

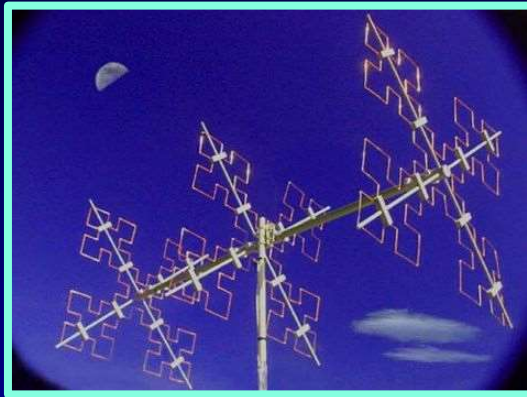
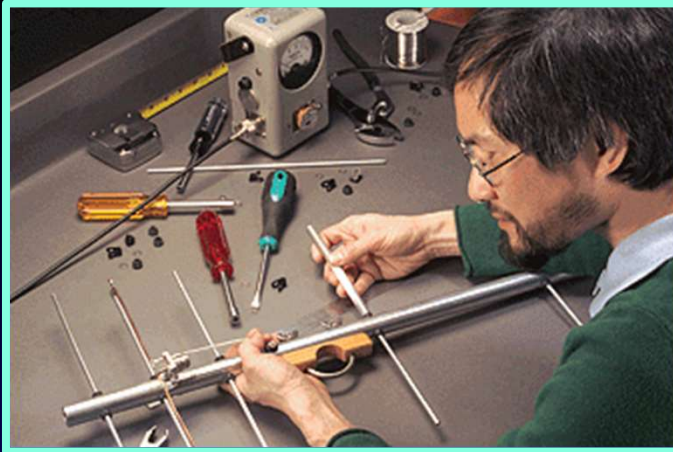


Req. 9.a.(1): Amateur Radio Service

Req. 9.a.(1): Amateur Radio Service



K2BSA



Req. 9.a.(1): Amateur Radio Service



K2BSA



Req. 9.a.(1): Amateur Radio Service



SLIDE 5 1

K2BSA



Req. 9.a.(1): Amateur Radio Fun!



Basic Operating

SLIDE 6 13

K2B5A



Req. 9.a.(1): Amateur Radio Fun!



Directional antenna

Amateur Radio Direction Finding (ARDF)

“Foxhunting”

AMSAT is Amateur Radio in Space



Amateur Radio on the International Space Station is a partnership with AMSAT, ARRL, and NASA. Astronauts on the ISS contact Earth stations using amateur radio.





You can get started with equipment you already own ... AMSAT can show you how ...



Enjoy continent-wide coverage using a portable station ...



AMSAT Fox-1 Cubesat FM Repeater

- 435.180 MHz up
- 145.980 MHz down
- Launch 4Q 2014



... or build a home satellite station

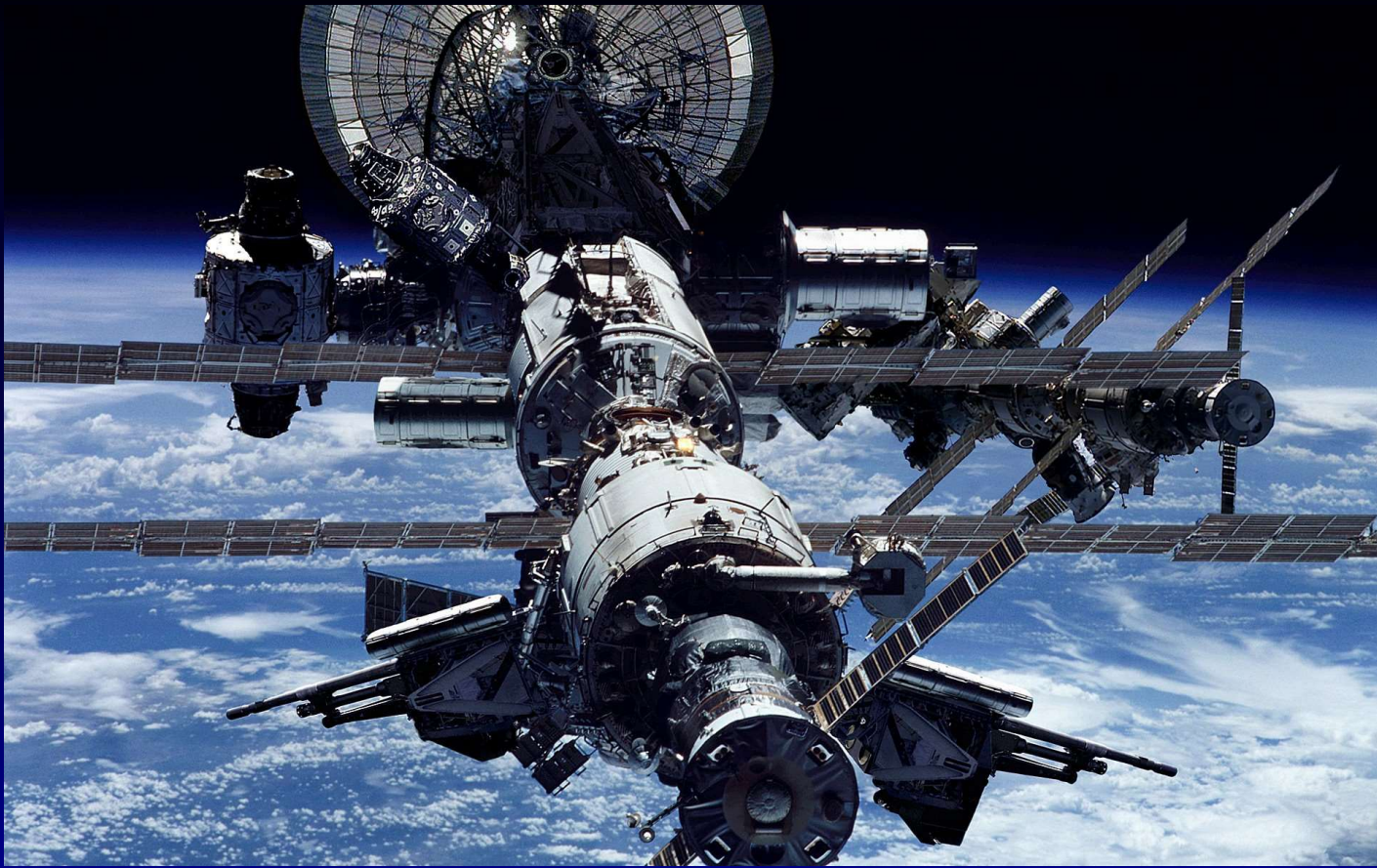


...To find out more ... visit us at:
www.amsat.org

K2B5A



Req. 9.a.(1): Amateur Radio Fun!



SLIDE 6 10

K2BSA



Req. 9.a.(1): Amateur Radio Fun!

Bicycle Mobile

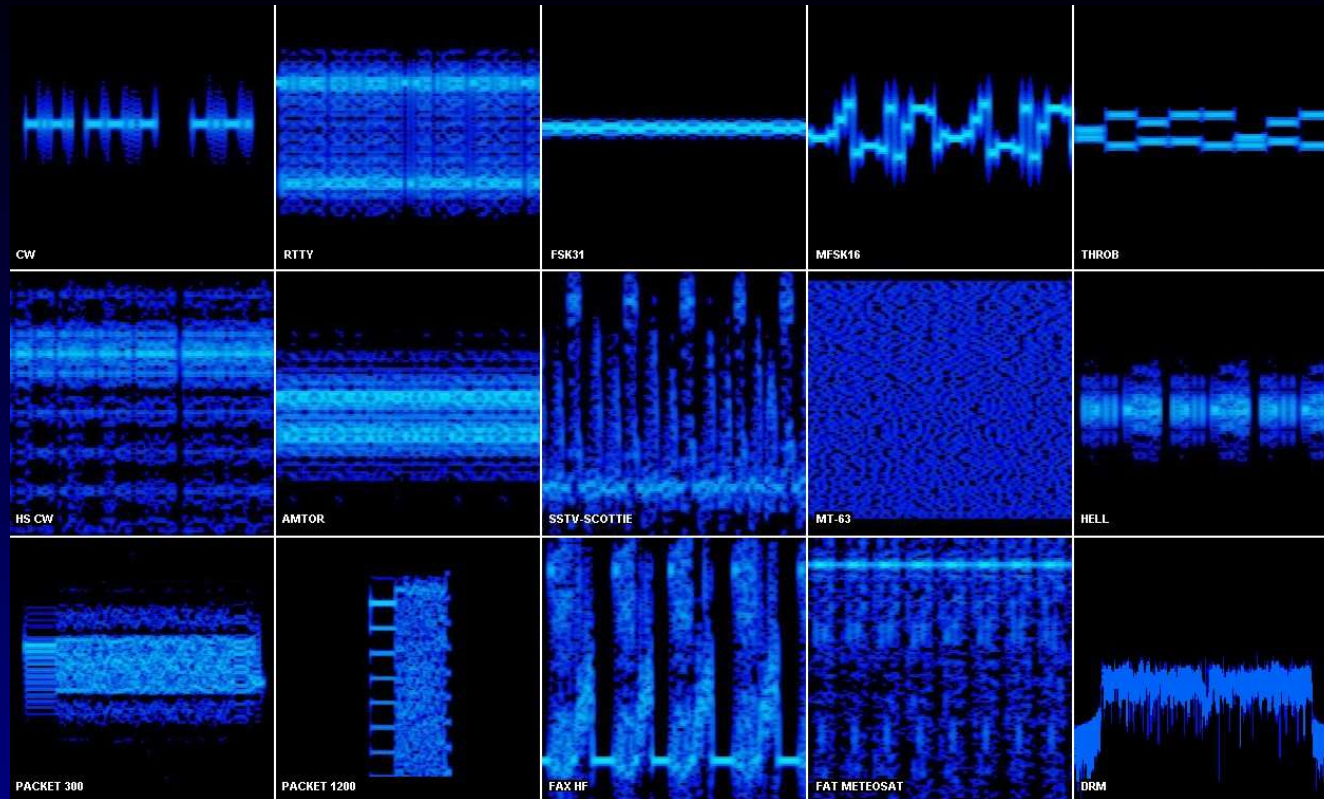


SLIDE 6 9

K2BSA



Req. 9.a.(1): Amateur Radio Fun!



Digital

K2B5A



Req. 9.a.(1): Amateur Radio Fun!



Digital

SLIDE 6 7

K2BSA



Req. 9.a.(1): Amateur Radio Fun!

K2BSA



Req. 9.a.(1): Amateur Radio Fun!



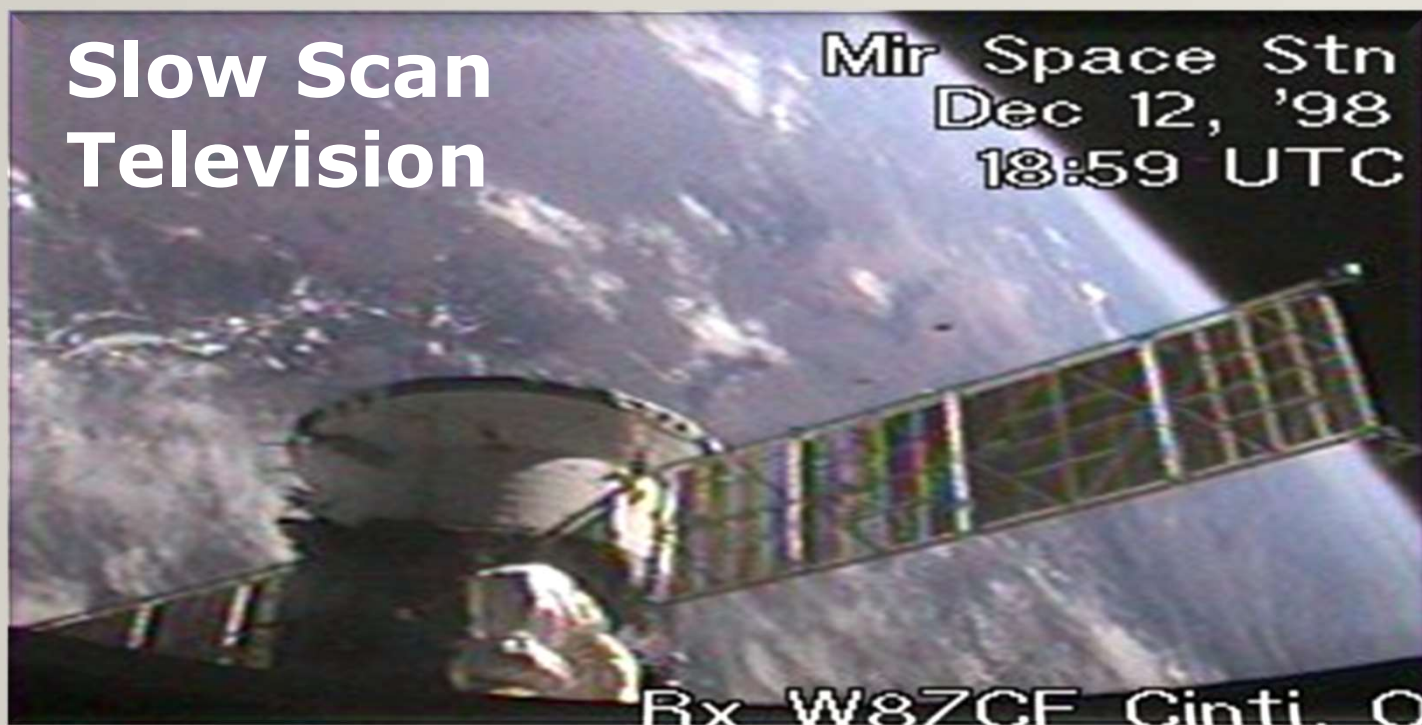
SLIDE 6 5

K2B5A



Req. 9.a.(1): Amateur Radio Fun!

Slow Scan Television

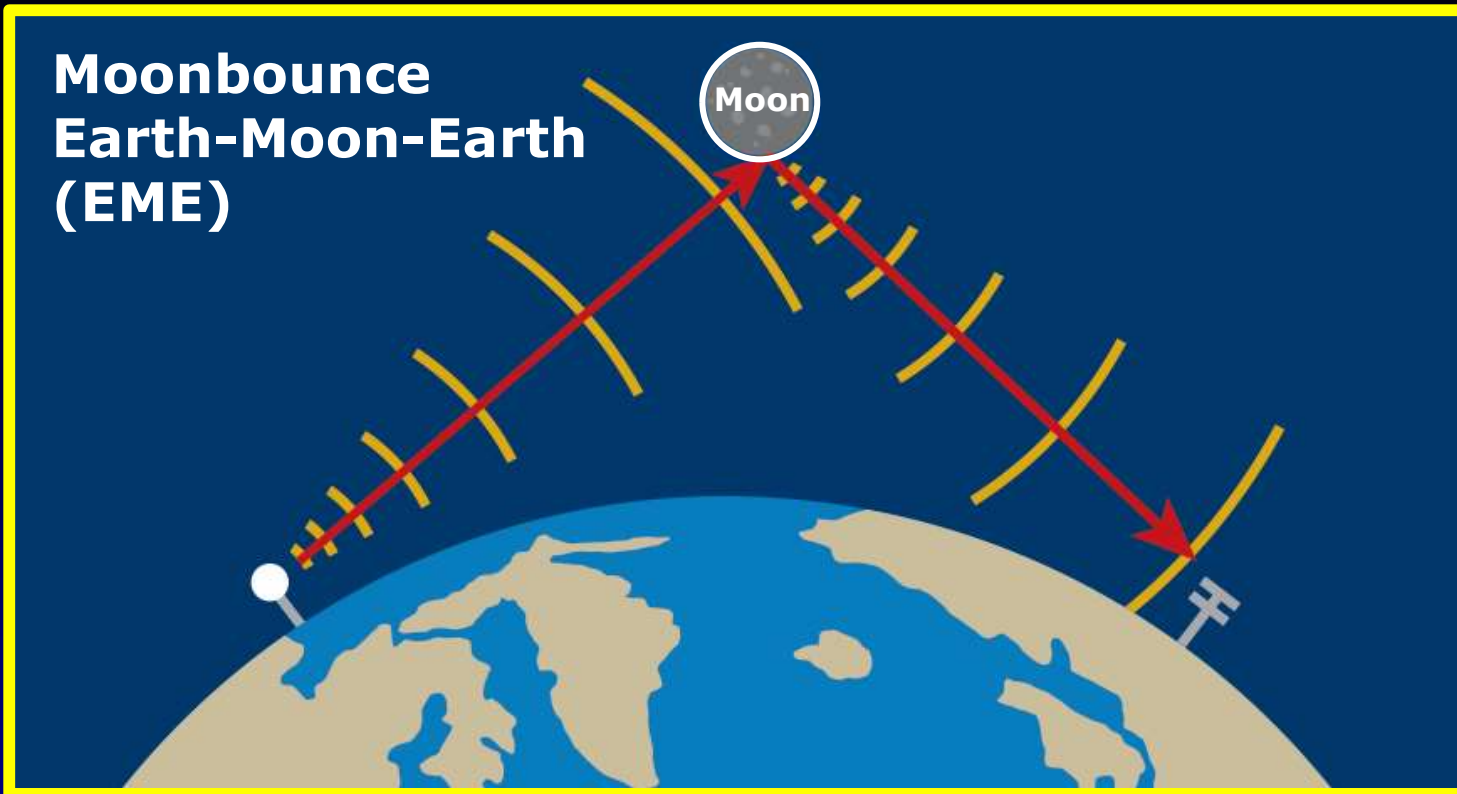


Mir Space Stn
Dec 12, '98
18:59 UTC

Rx W8ZCF Cinti. O.

Req. 9.a.(1): Amateur Radio Fun!

Moonbounce Earth-Moon-Earth (EME)



K2BSA



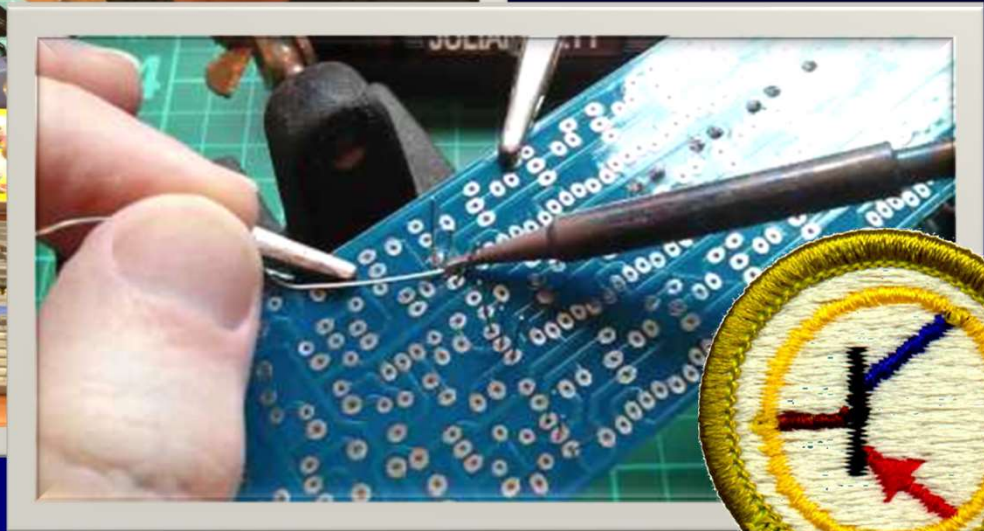
Req. 9.a.(1): Amateur Radio Fun!



K2BSA



Req. 9.a.(1): Amateur Radio Fun!



SLIDE 6 1

TYPES OF HAM RADIO EQUIPMENT

ASB
K2



Req. 9.a.(5): Types of Equipment



Base Station Transceiver

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Req. 9.a.(5): Types of Equipment



Ham Shack (Base Station)

Req. 9.a.(5): Types of Equipment



MobileTransceiver

Req. 9.a.(5): Types of Equipment



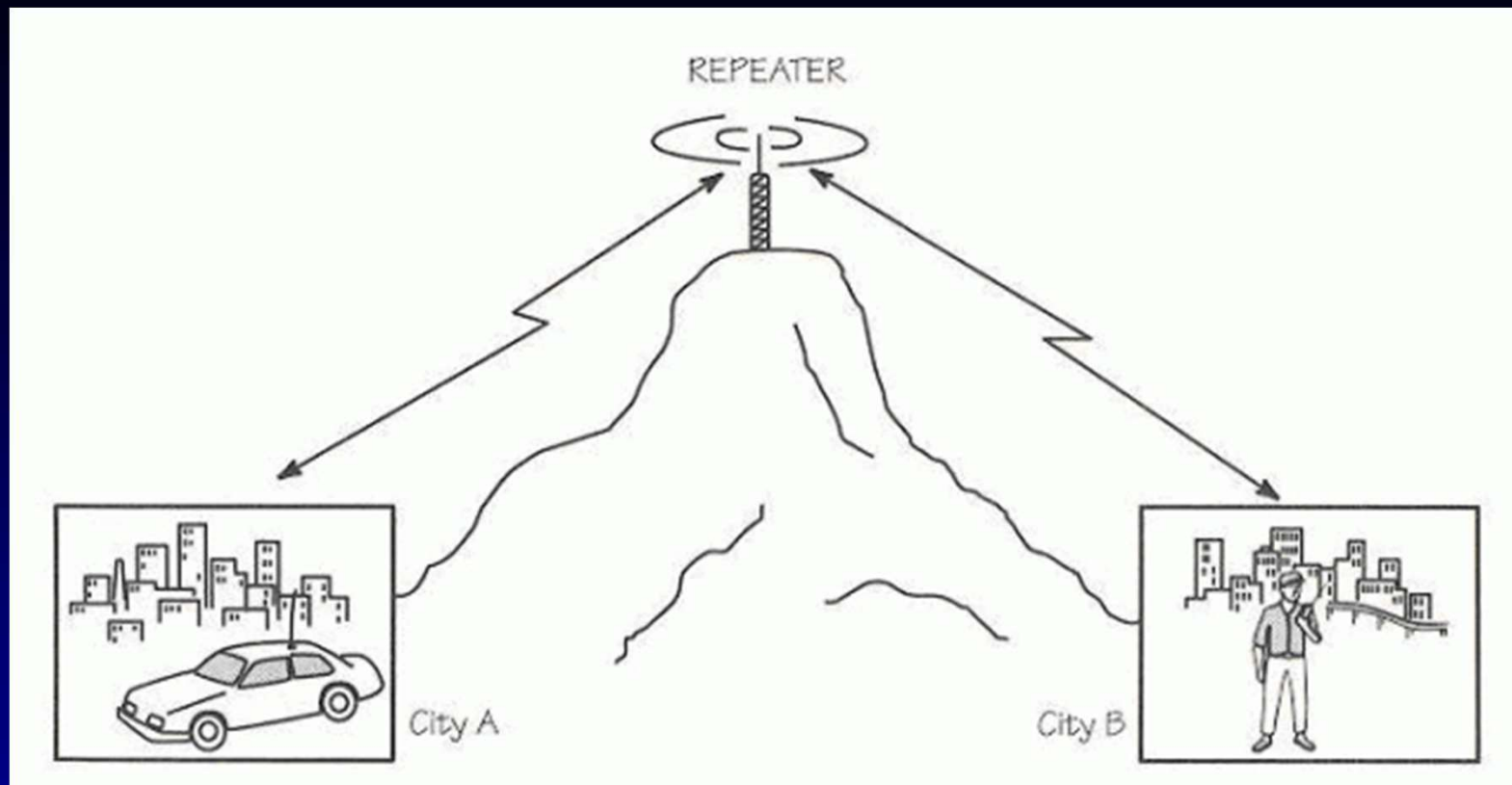
Req. 9.a.(5): Types of Equipment



H-T

Repeaters

Req. 9.a.(5): Repeaters



Req. 9.a.(4): Emergency Calls





"BREAK-BREAK"

K2BSA



"BREAK-BREAK"

"MAYDAY!"

K2BSA



"BREAK-BREAK"

"MAYDAY!"

"EMERGENCY!"

Req. 9.a.(4): Emergency Calls



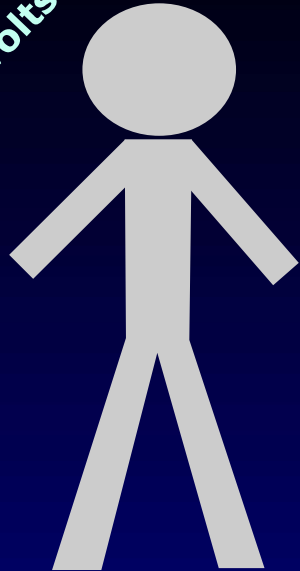
K2B5A



S O S

ASBSA
K2

120 volts AC



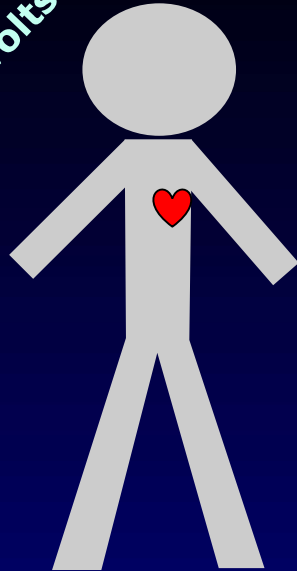
Safety!



K2BSA



120 volts AC



Req. 6: Electrical Safety

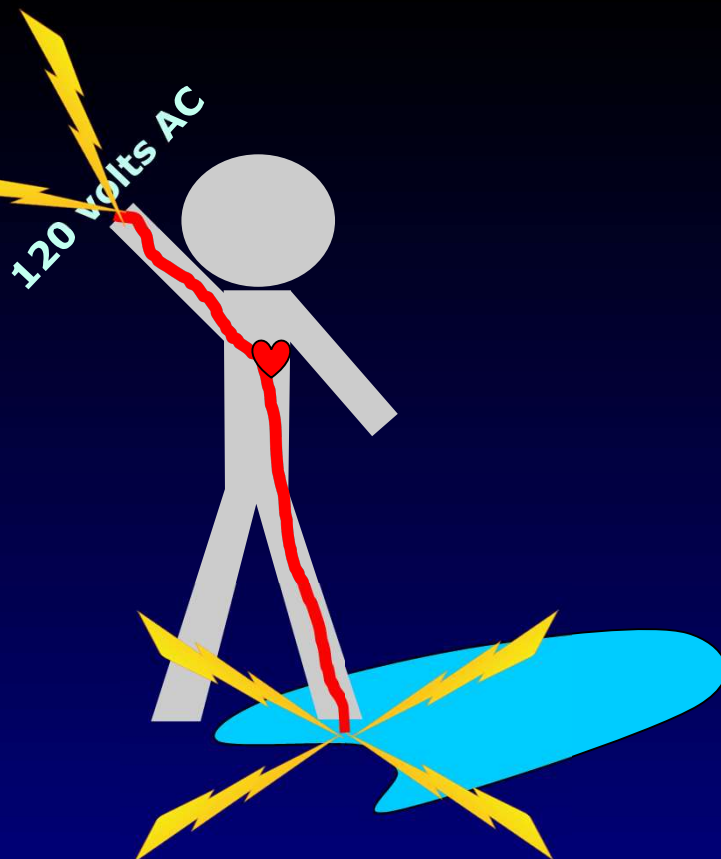
Req. 6: Electrical Safety



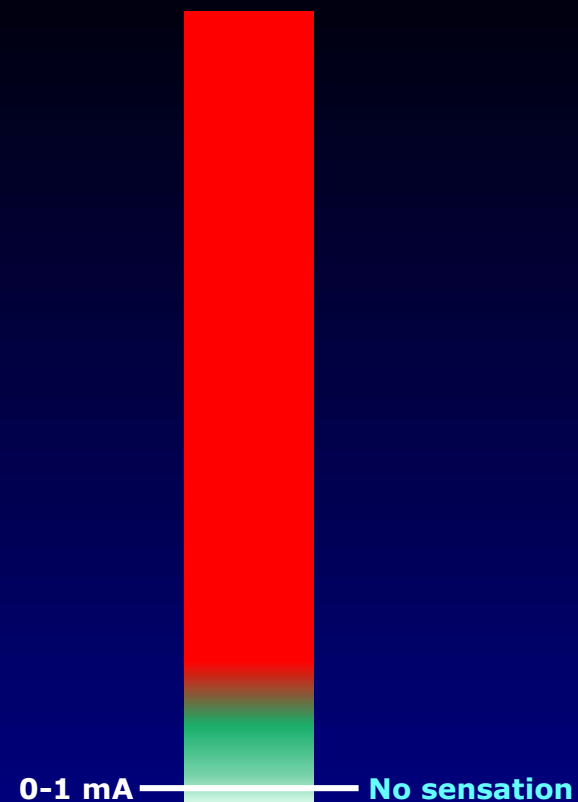
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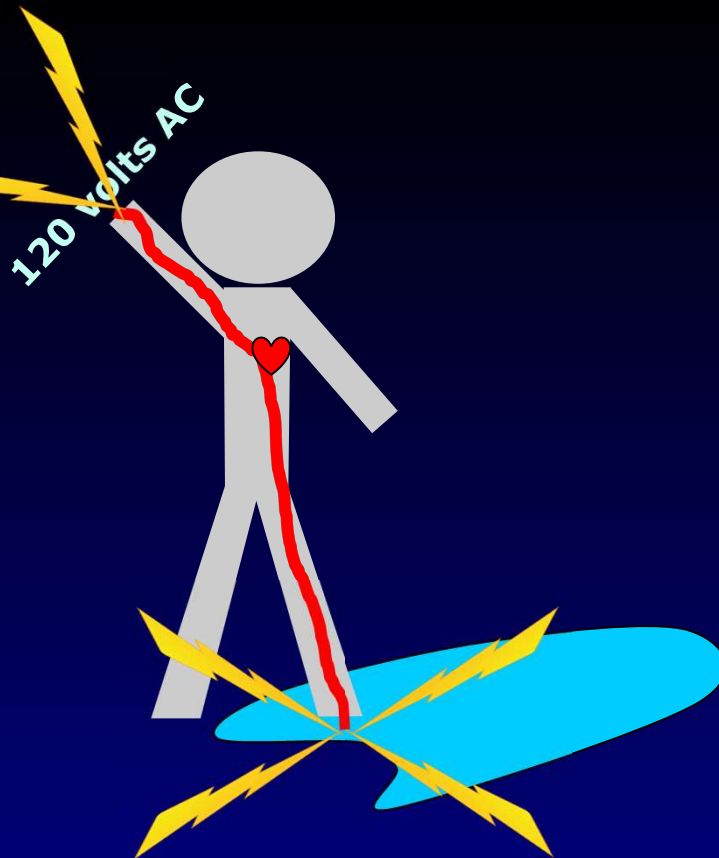
K2B5A



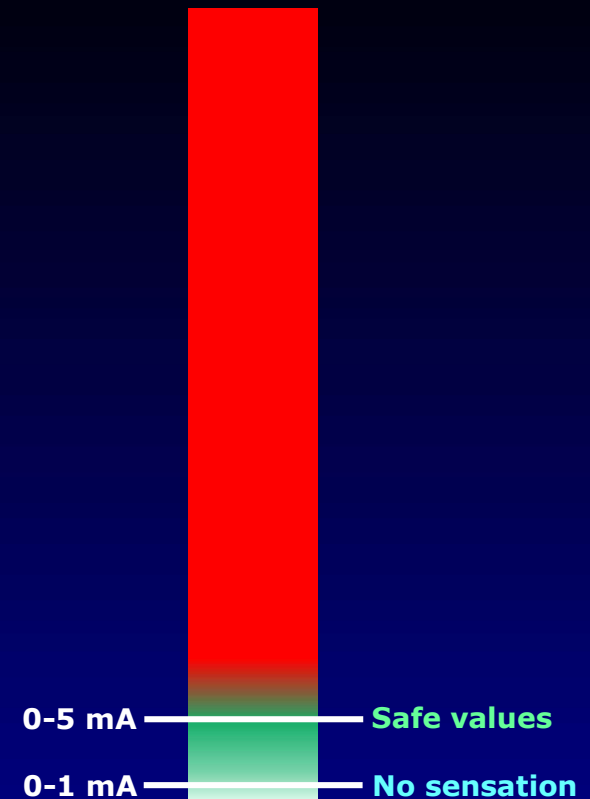
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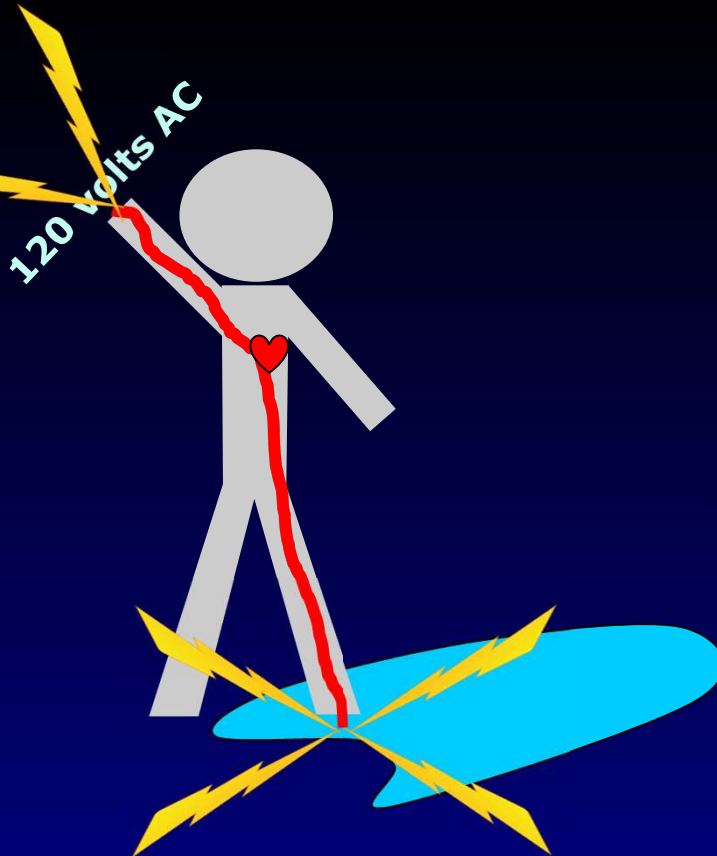
K2B5A



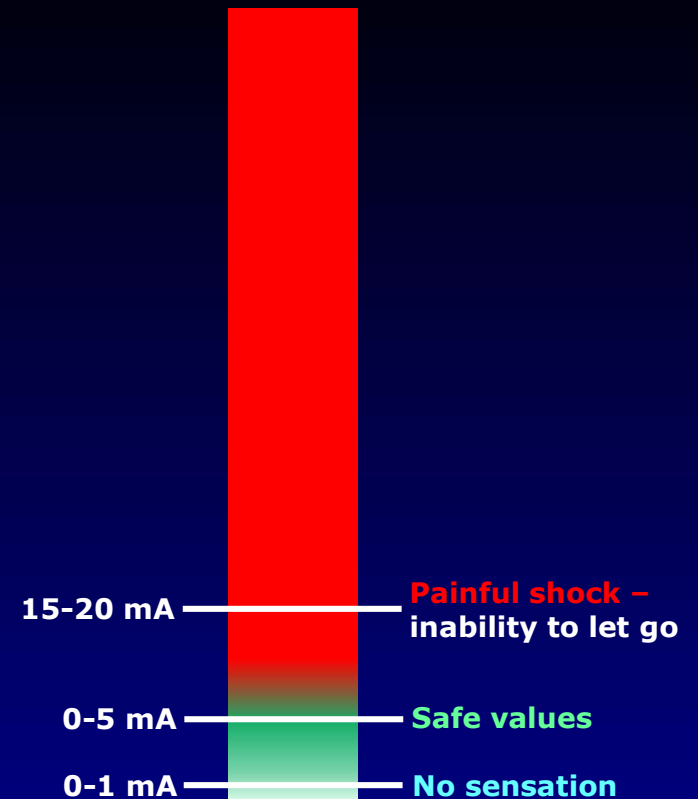
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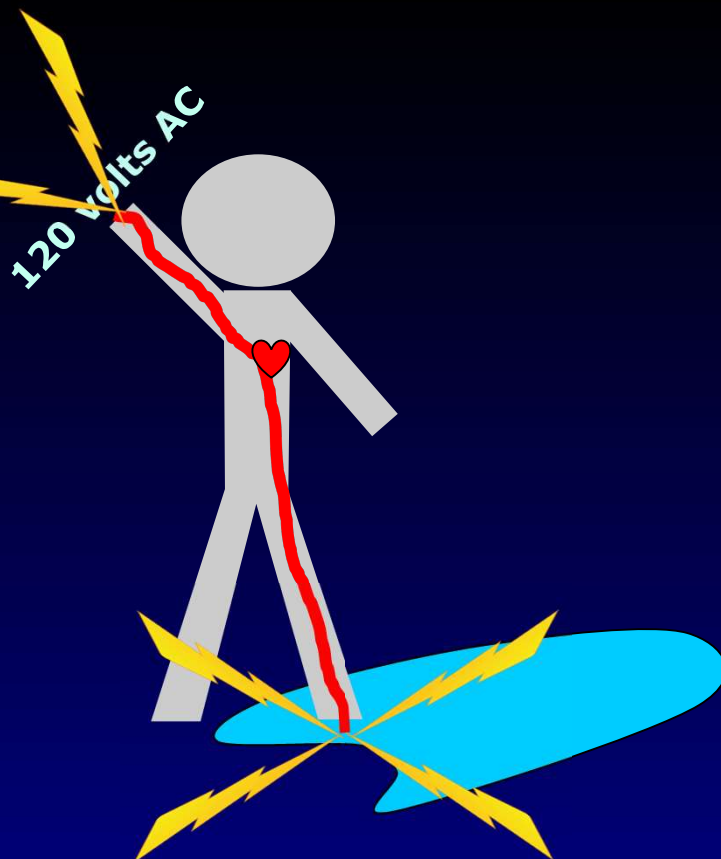
K2B5A



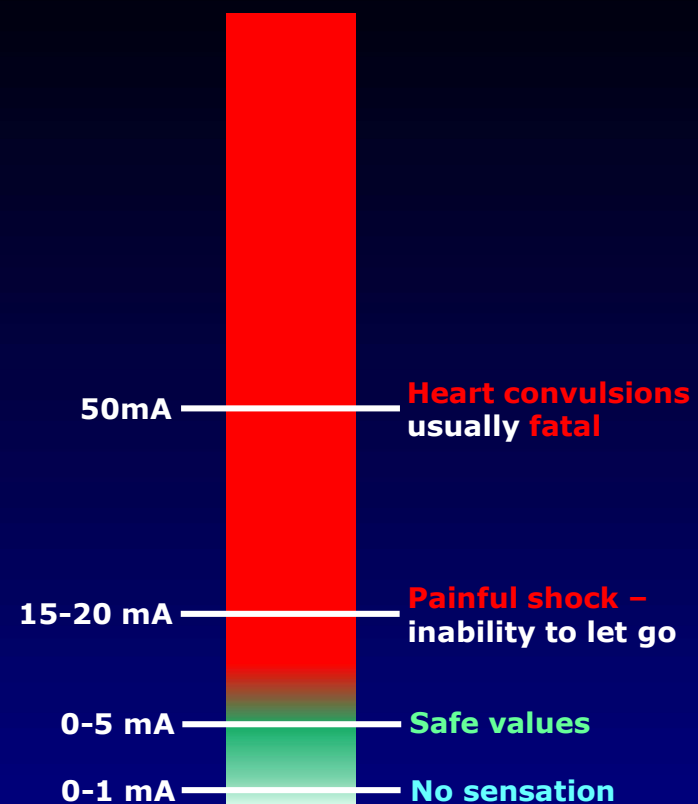
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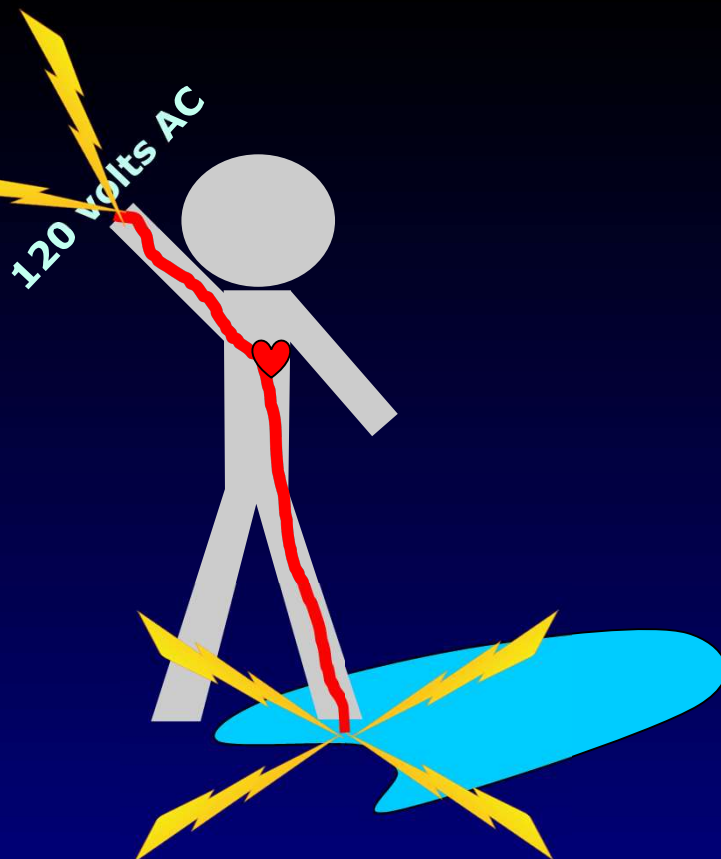
K2BSA



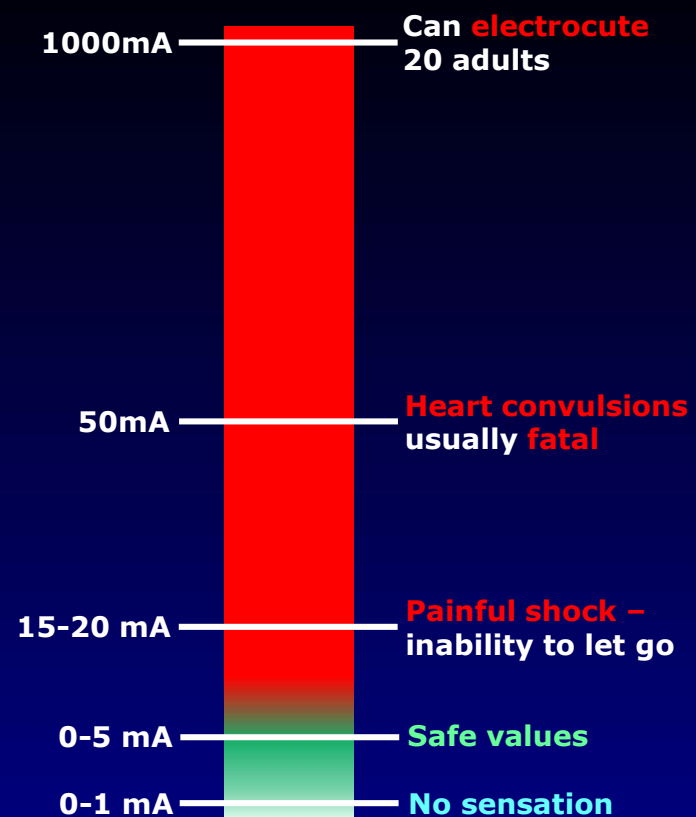
Req. 6: Electrical Safety



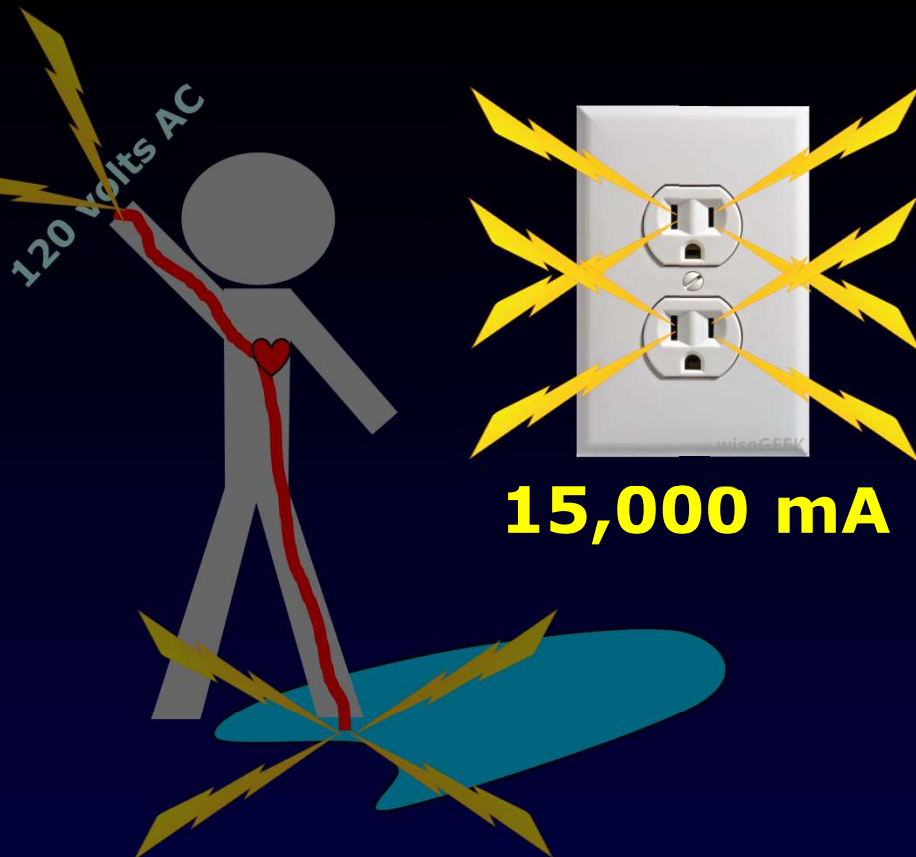
K2BSA



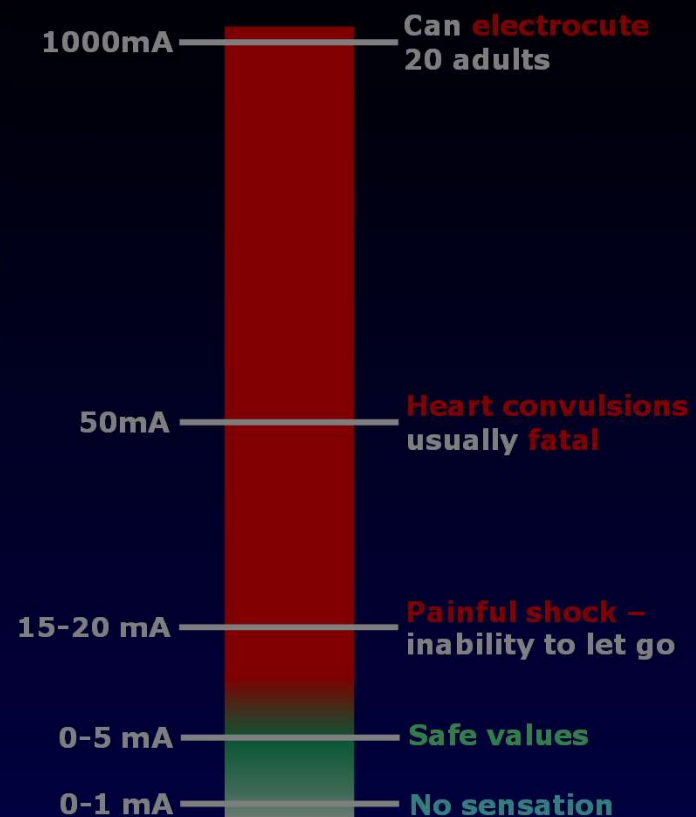
Req. 6: Electrical Safety



K2BSA



Req. 6: Electrical Safety

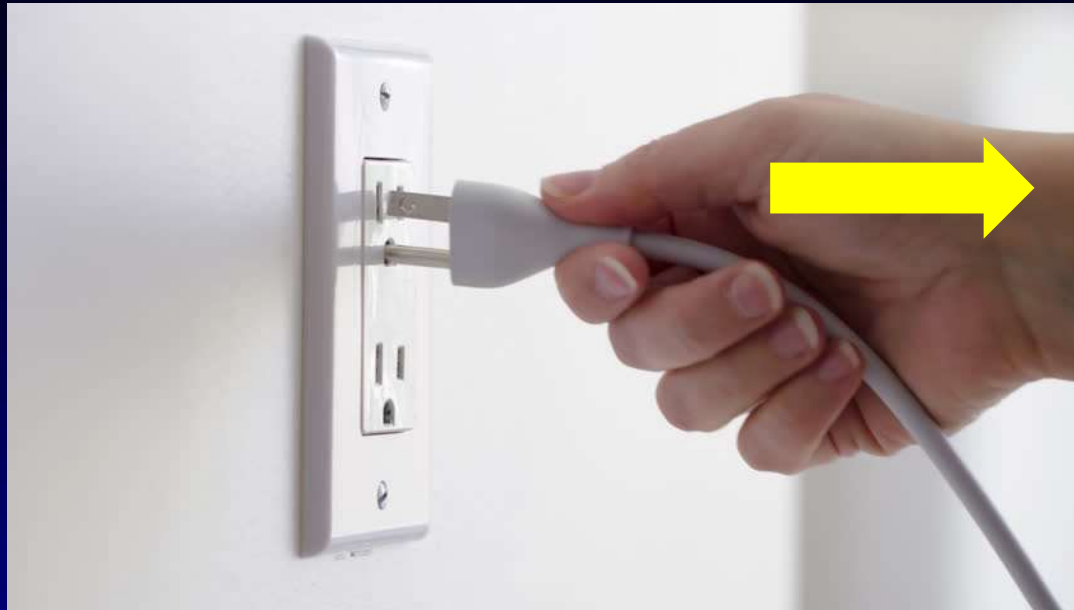


K2B5A



Safety Rules!

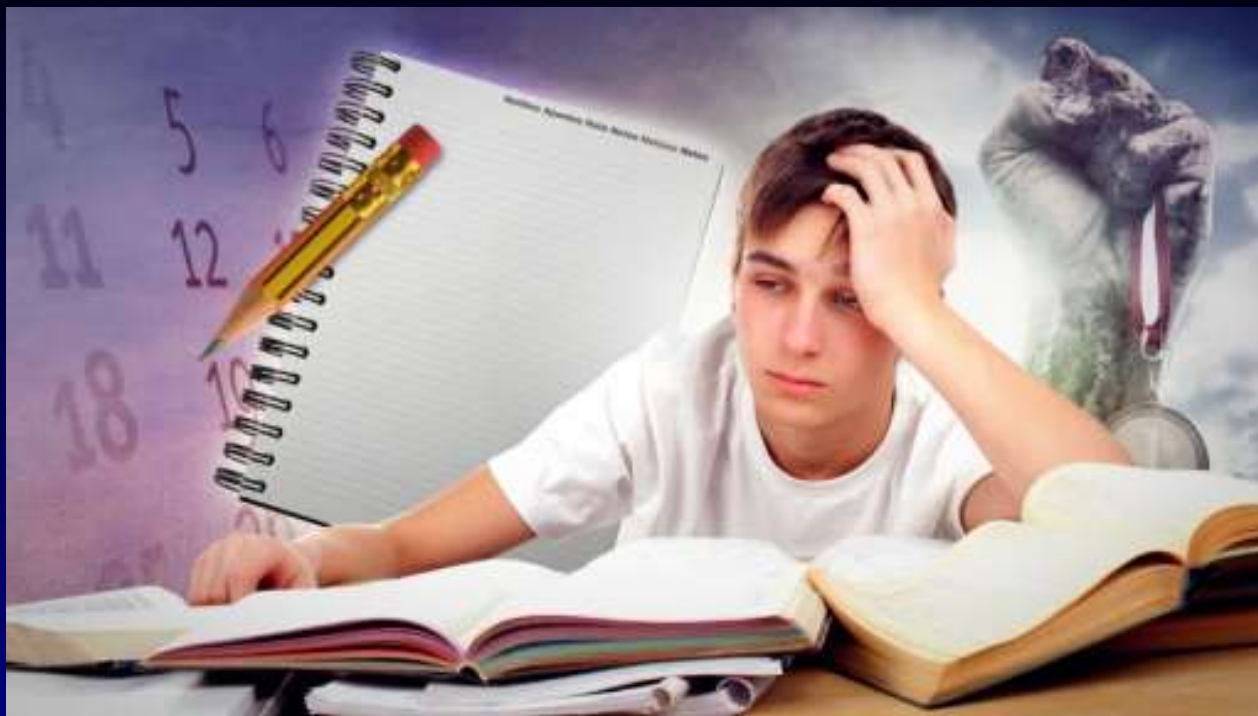
Req. 6: Electrical Safety Rules



Req. 6: Electrical Safety Rules



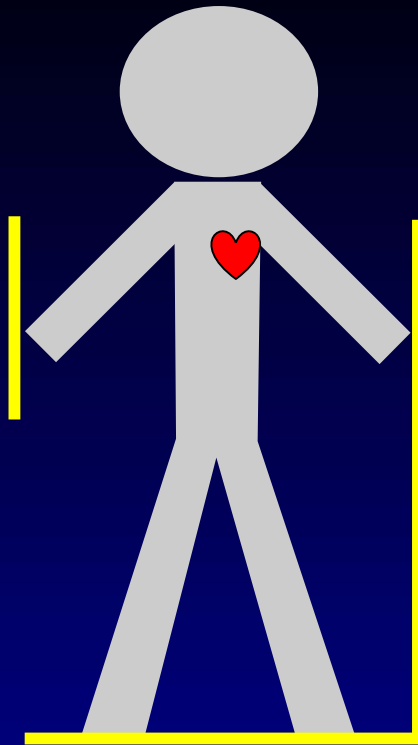
Req. 6: Electrical Safety Rules



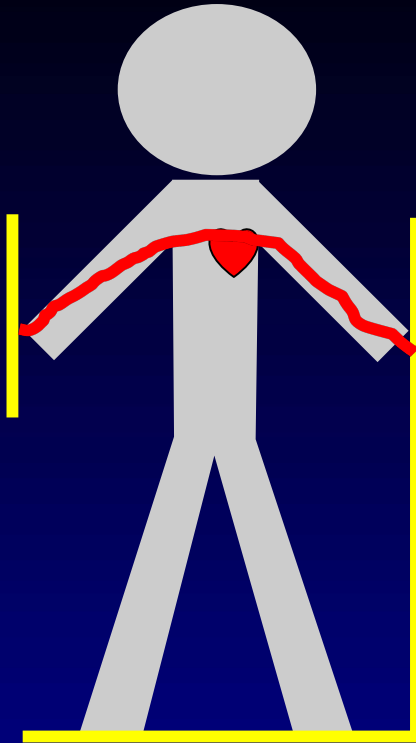


Req. 6: Electrical Safety Rules

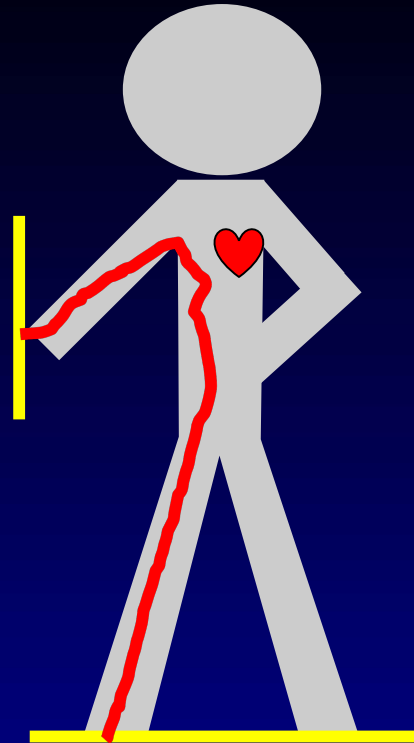
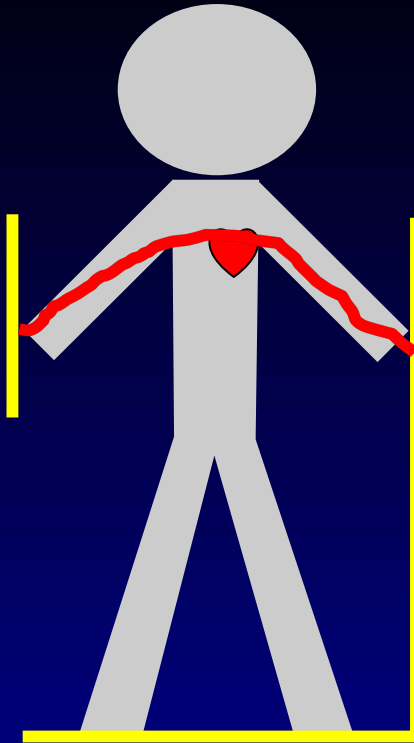
Req. 6: Electrical Safety Rules



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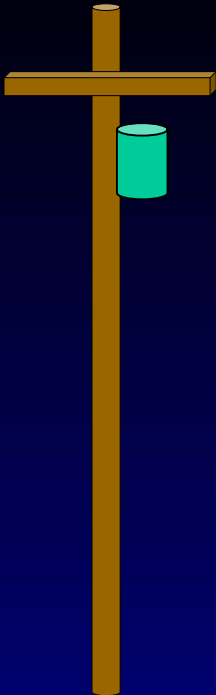




Grounding

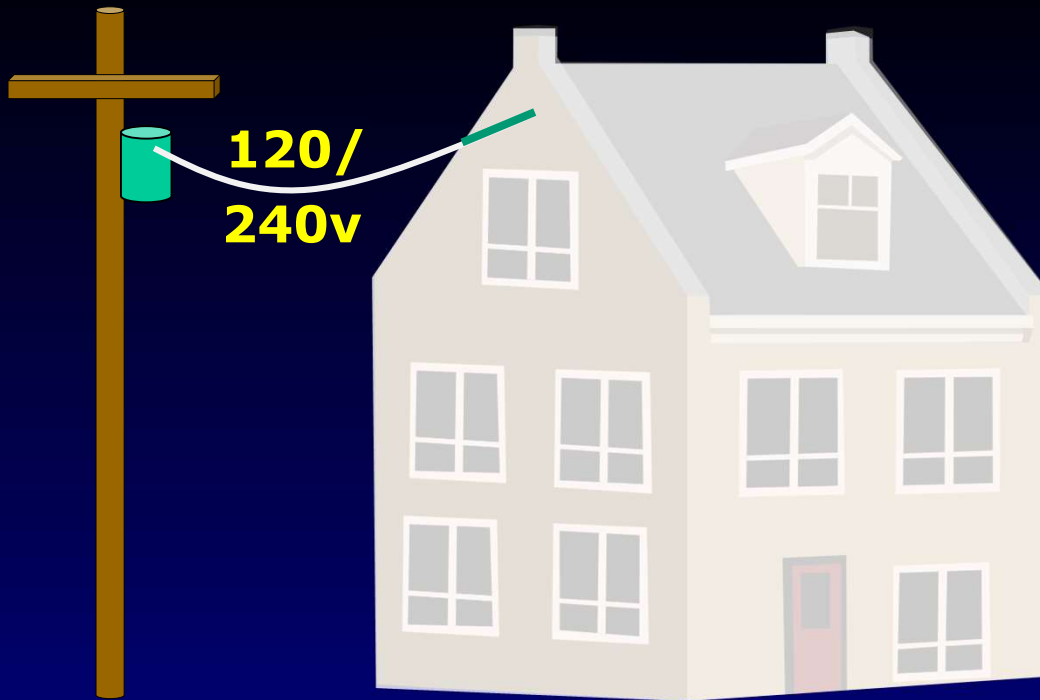
Req. 6: Electrical Grounding Safety

K2B5A



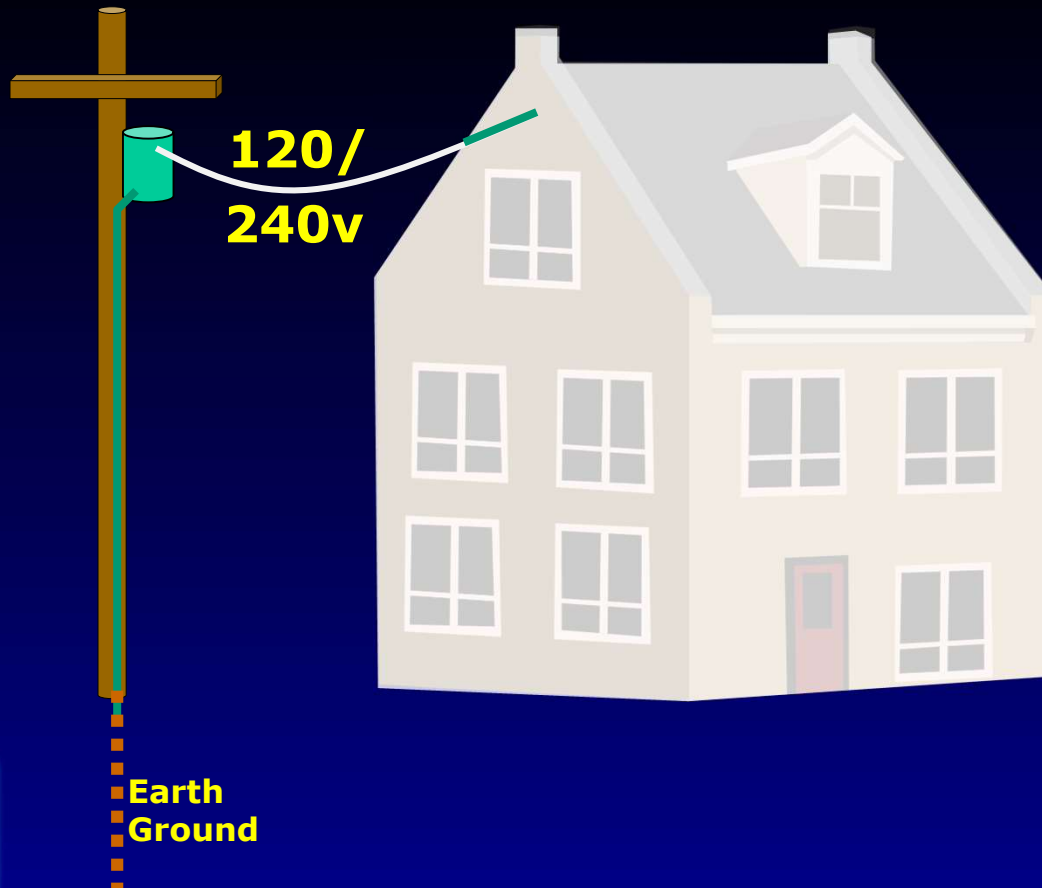
Req. 6: Electrical Grounding Safety

K2B5A

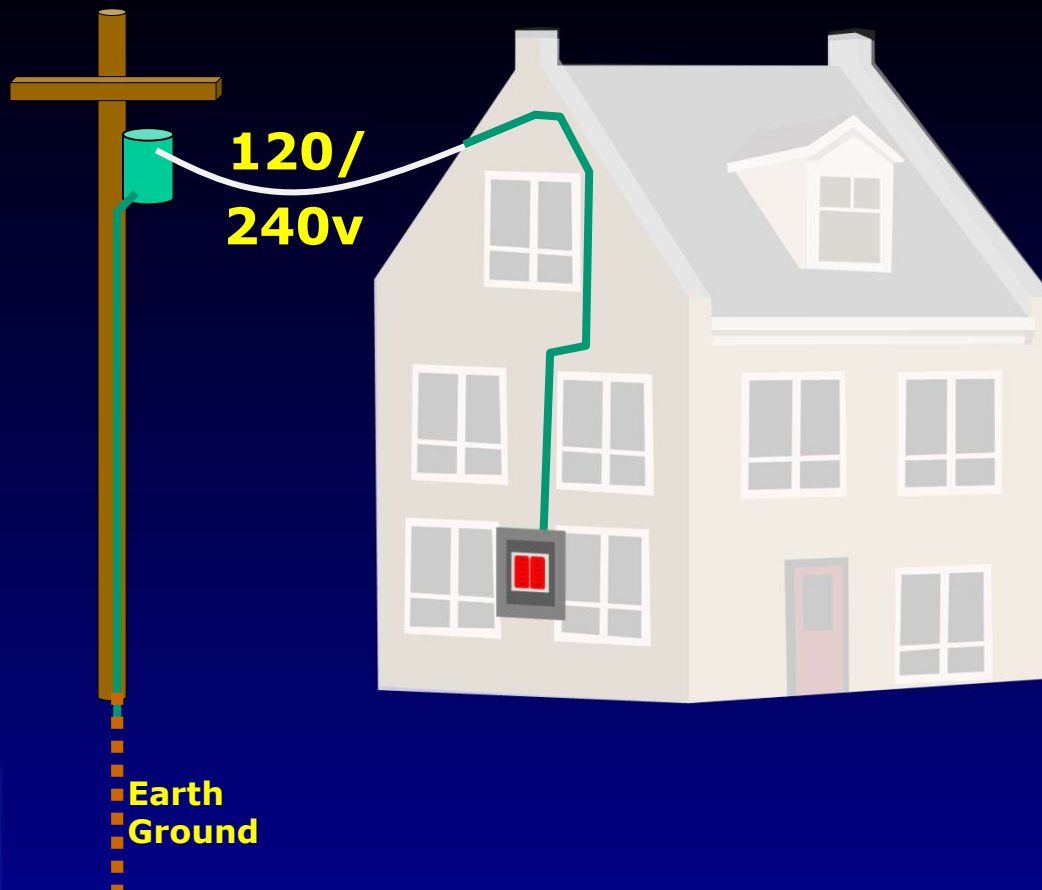


Req. 6: Electrical Grounding Safety

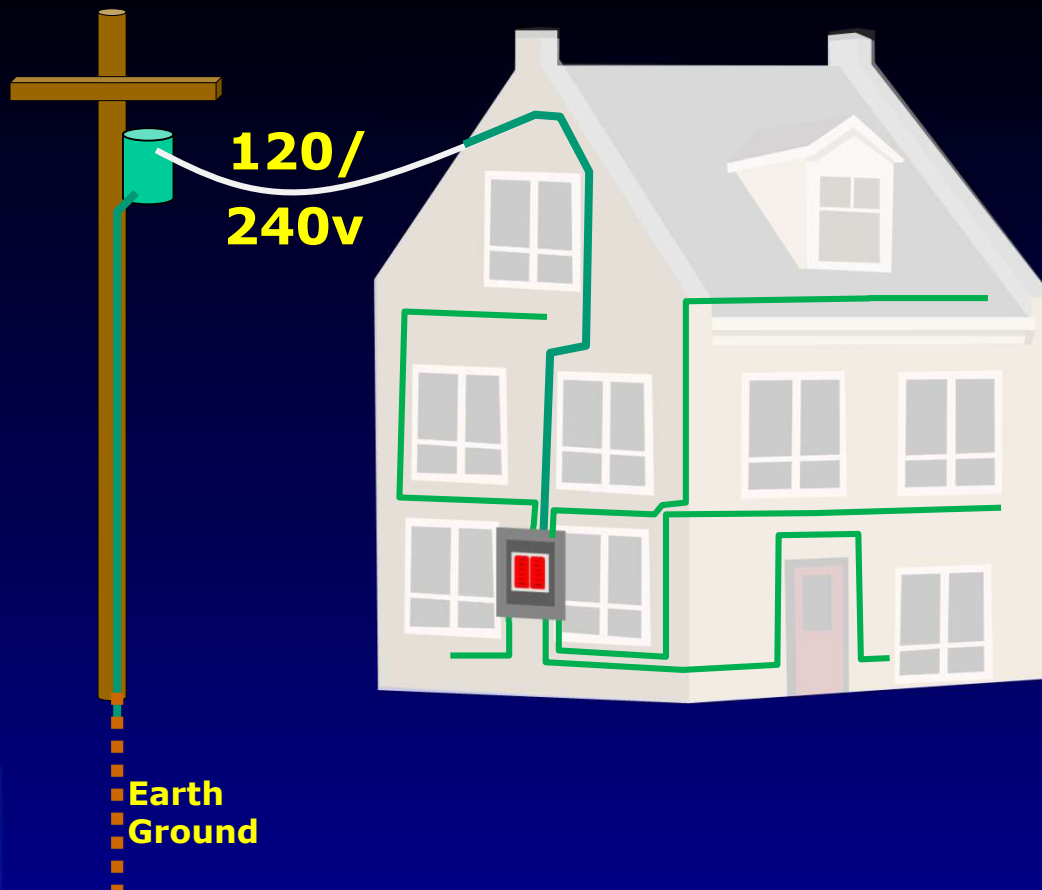
K2B5A



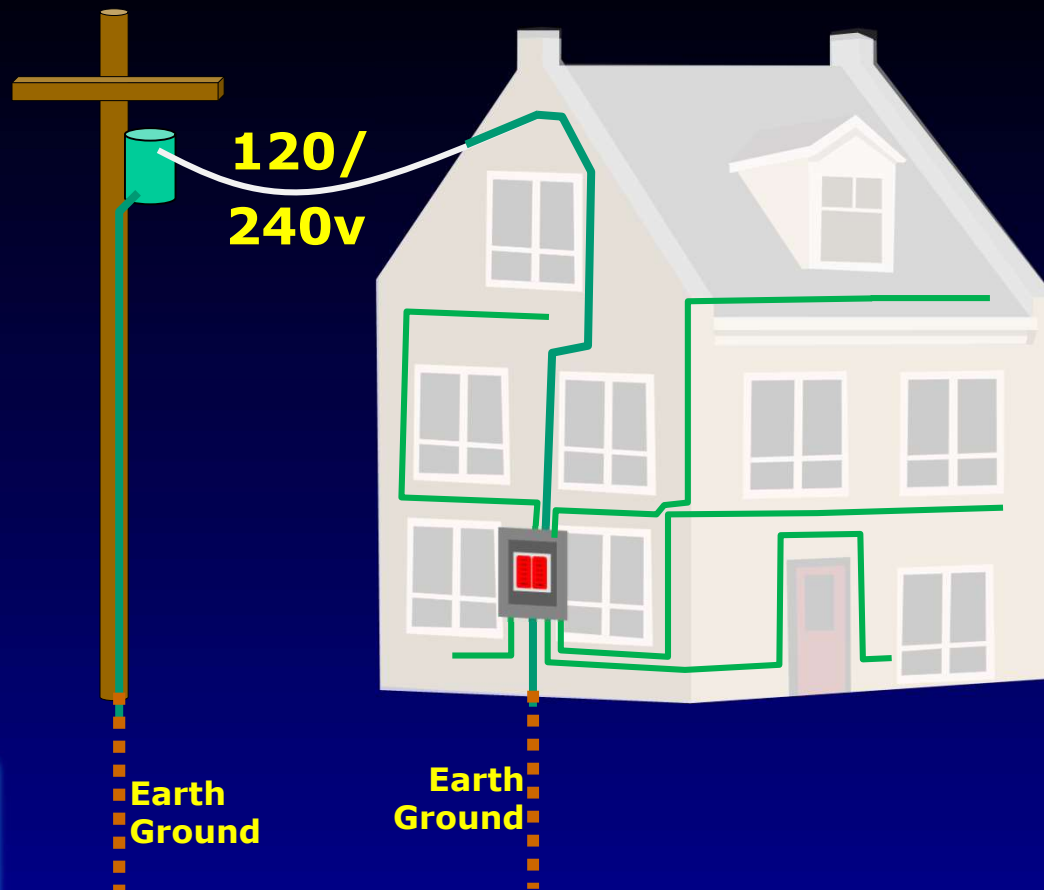
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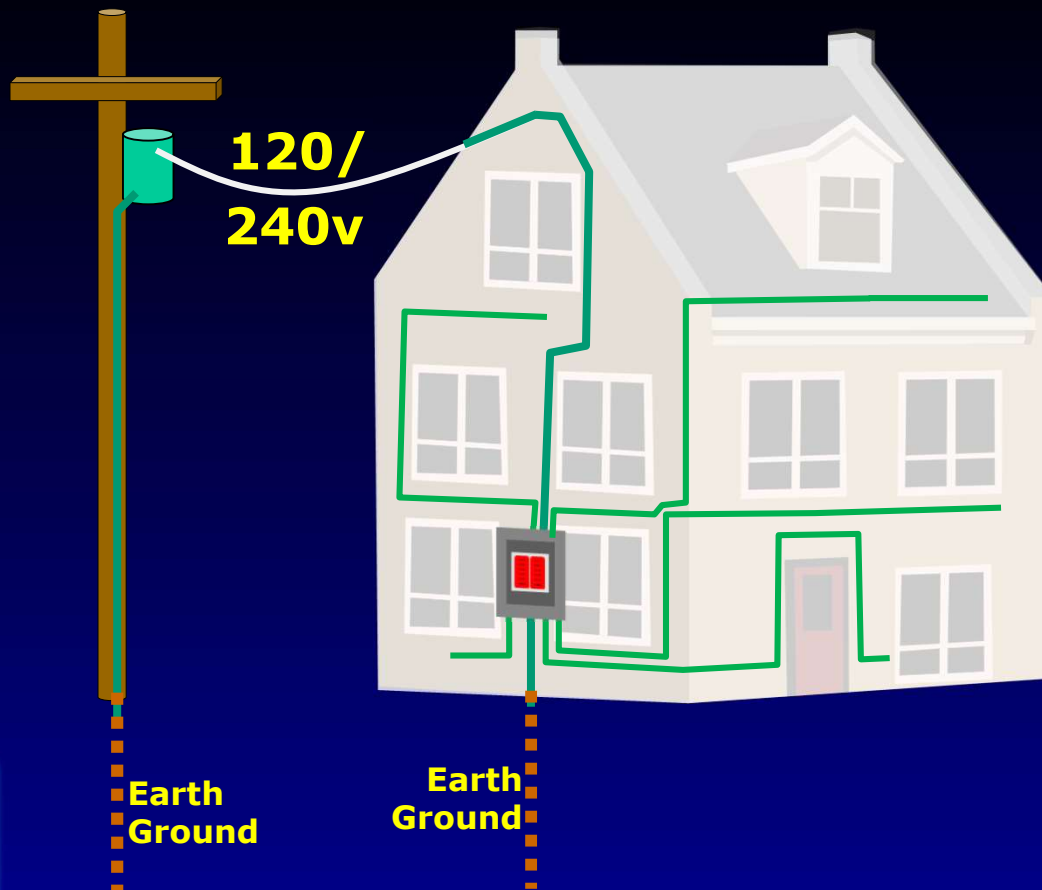
Req. 6: Electrical Grounding Safety



Req. 6: Electrical Grounding Safety



K2B5A



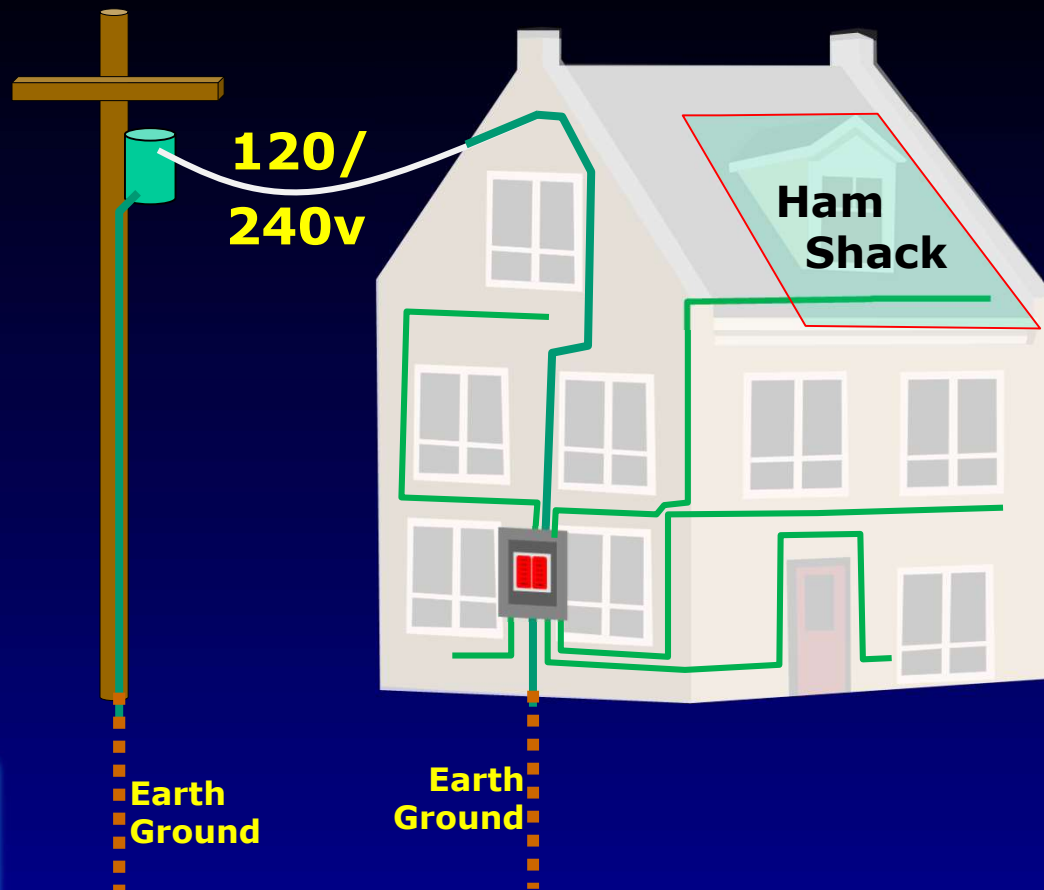
Req. 6: Electrical Grounding Safety



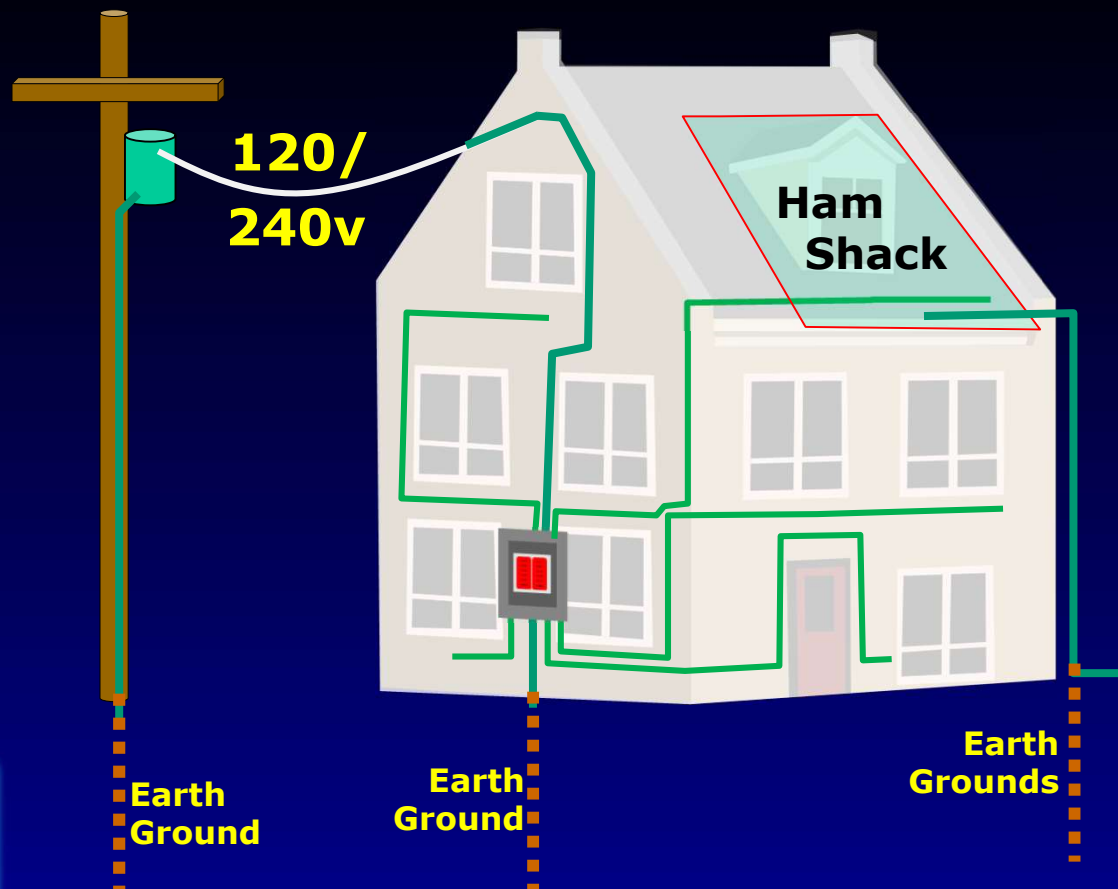
K2BSA



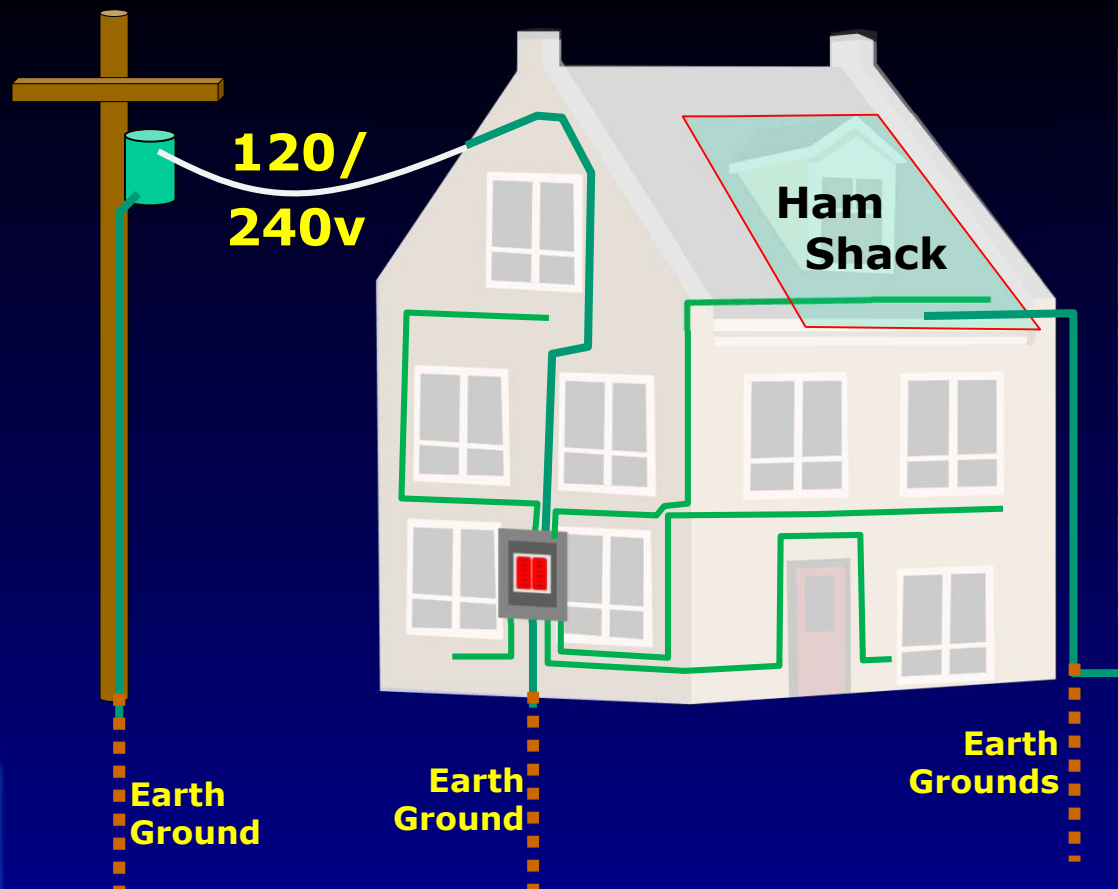
Req. 6: Electrical Grounding Safety



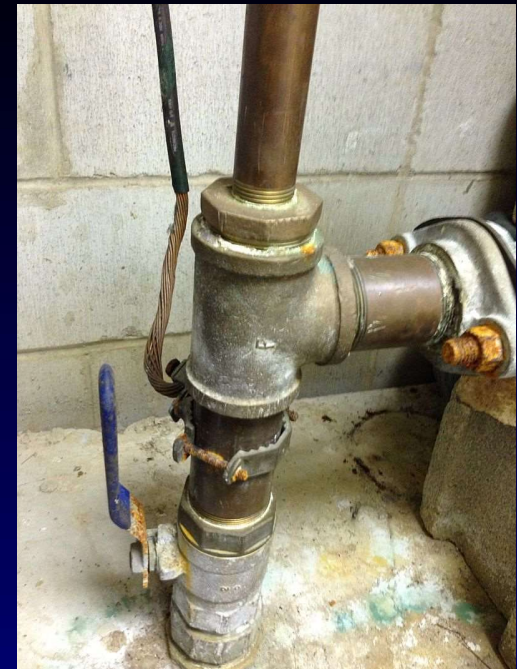
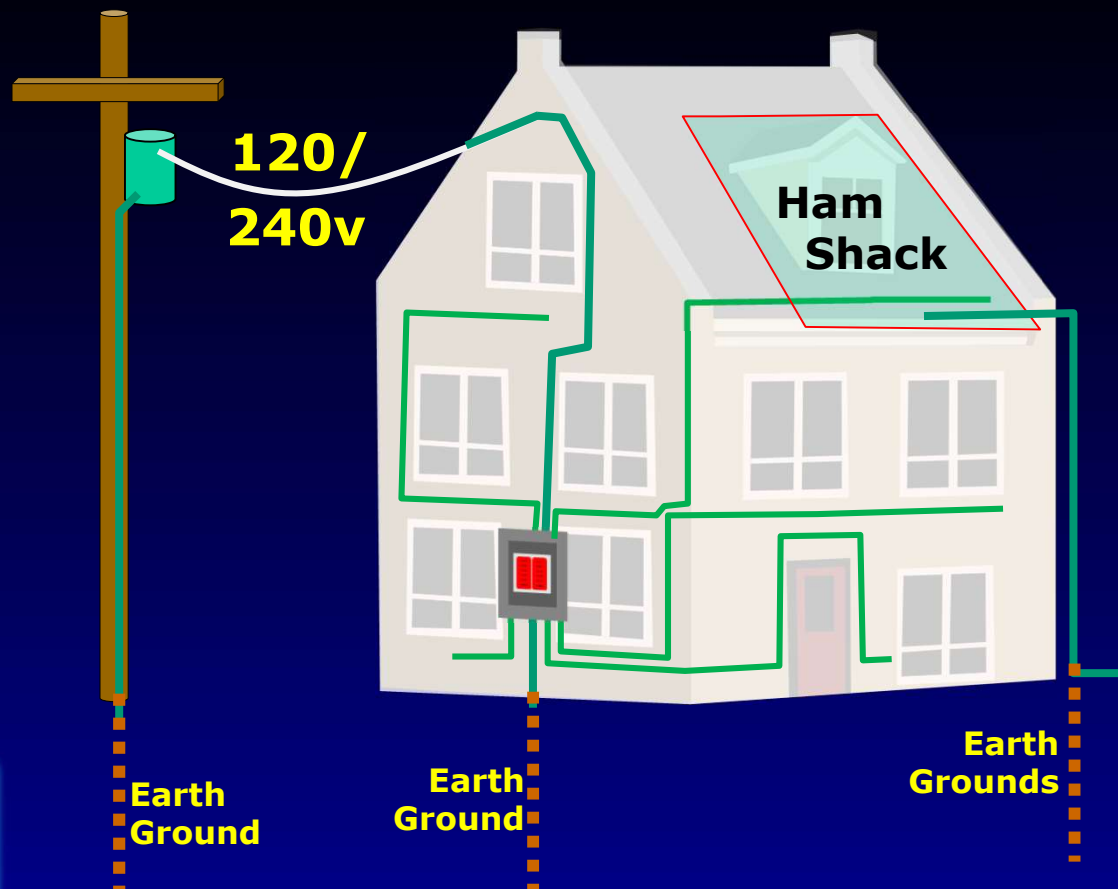
Req. 6: Electrical Grounding Safety



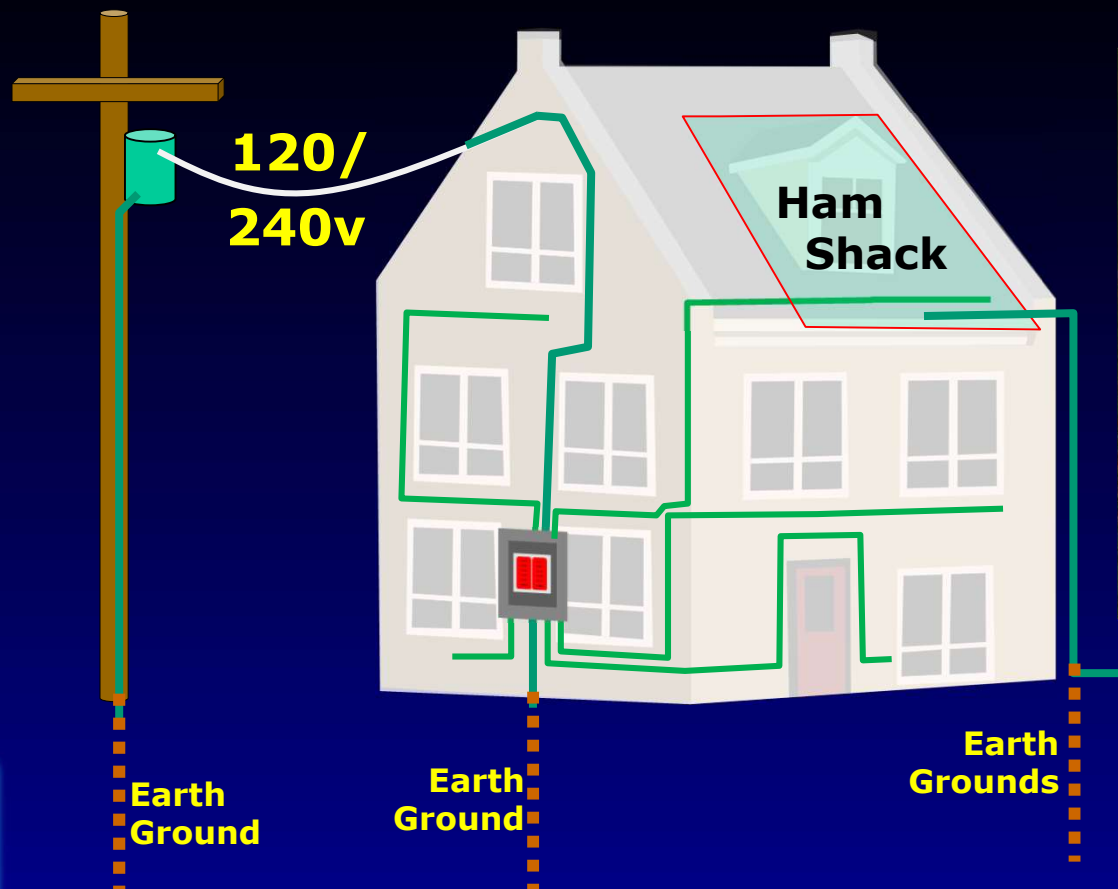
Req. 6: Electrical Grounding Safety



Req. 6: Electrical Grounding Safety



Req. 6: Electrical Grounding Safety





Req. 6: Electrical Safety Rules



Req. 6: Electrical Safety Rules





Safety in the Radio Shack

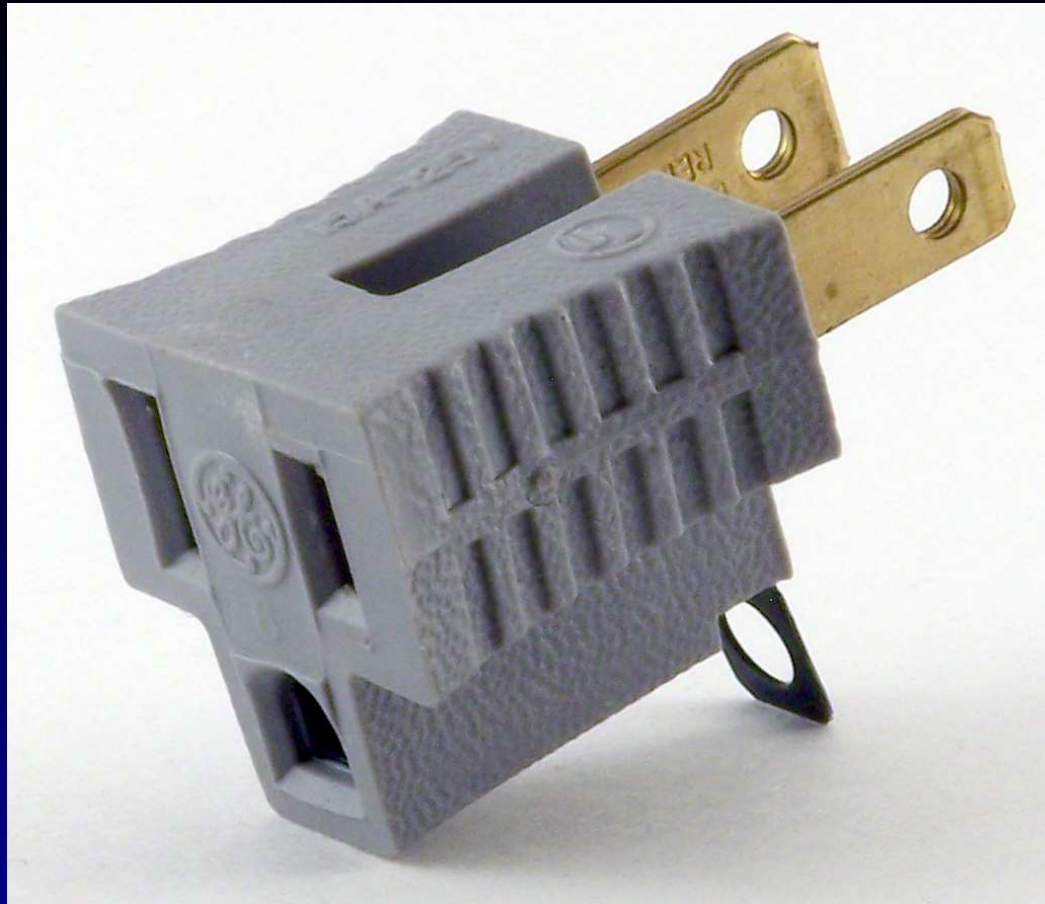
Req. 6: Safety in the Radio Shack



Req. 6: Safety in the Radio Shack



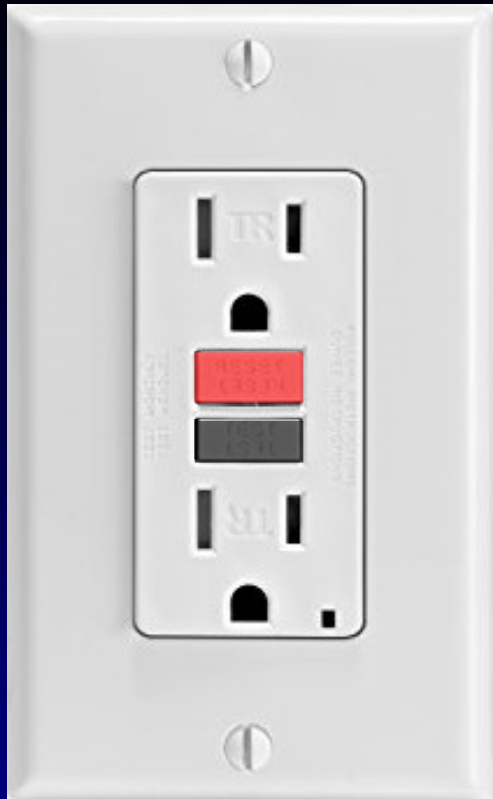
Req. 6: Safety in the Radio Shack



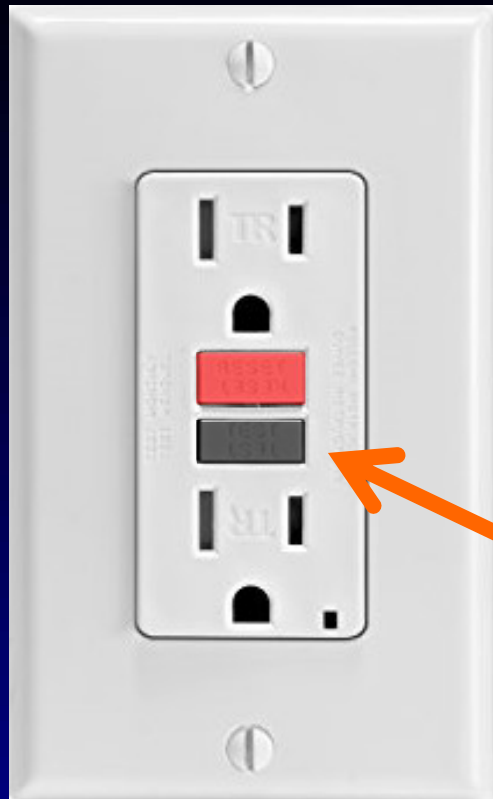
Req. 6: Safety in the Radio Shack



Req. 6: Safety in the Radio Shack

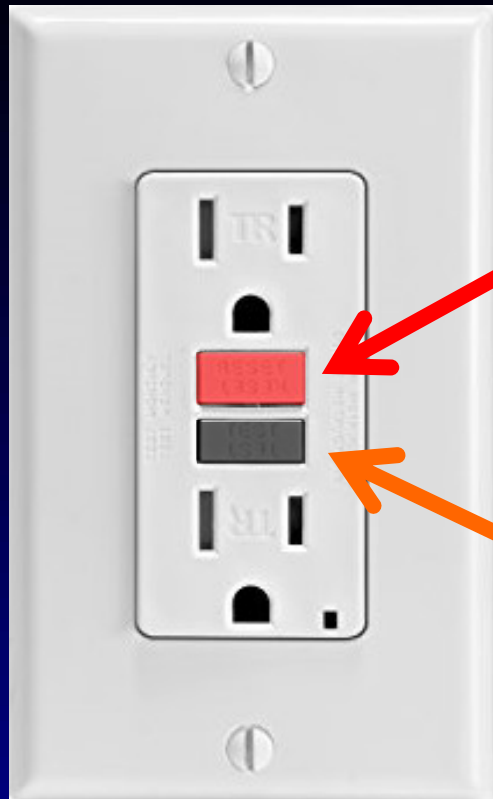


Req. 6: Safety in the Radio Shack



CIRCUIT TEST:
If power stops flowing
when this button is
pressed then the
device is working
properly.

Req. 6: Safety in the Radio Shack



CIRCUIT RESET:

Press this button to return the outlet to normal functioning if it has been tripped or after a test.

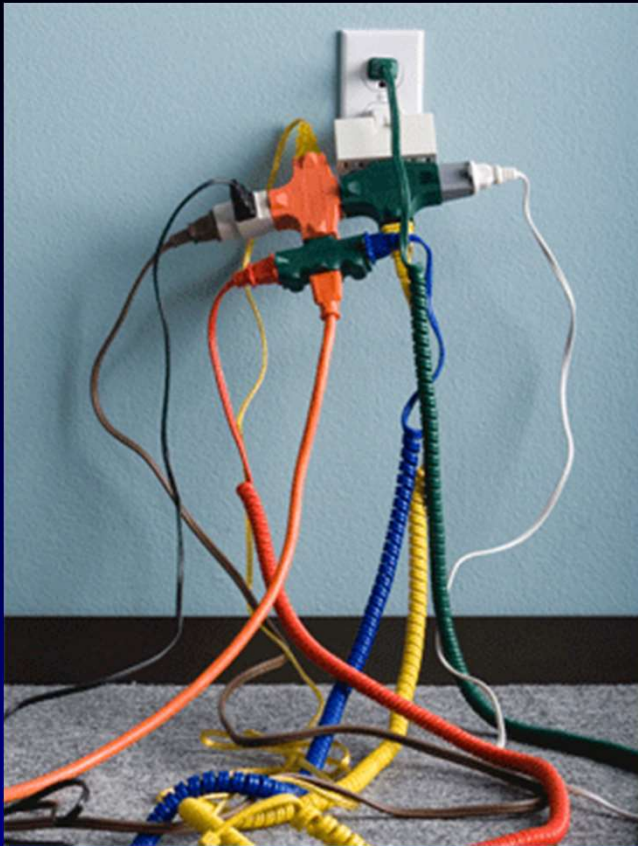
CIRCUIT TEST:

If power stops flowing when this button is pressed then the device is working properly.

Req. 6: Safety in the Radio Shack



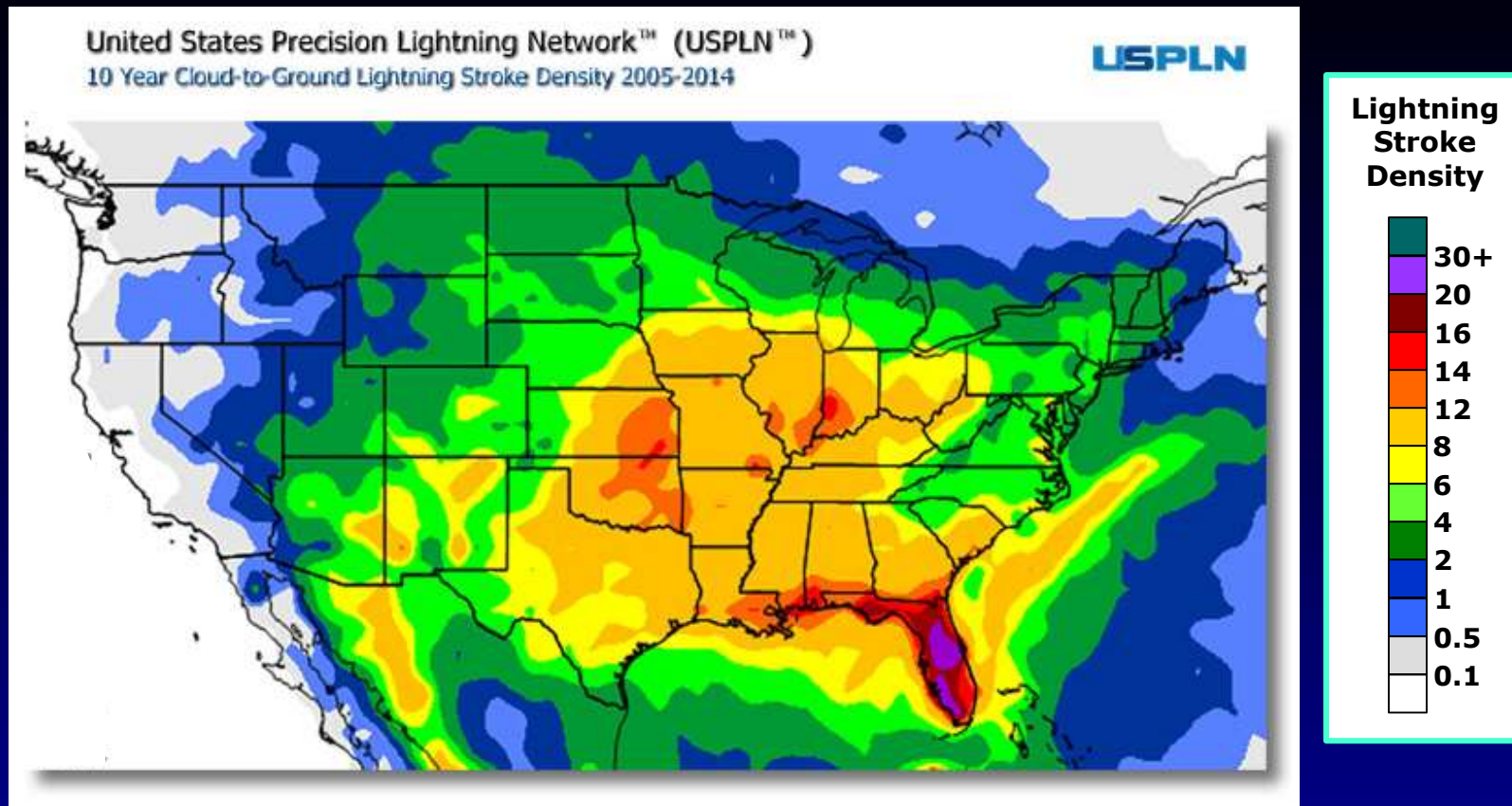
Req. 6: Electrical Cord Safety



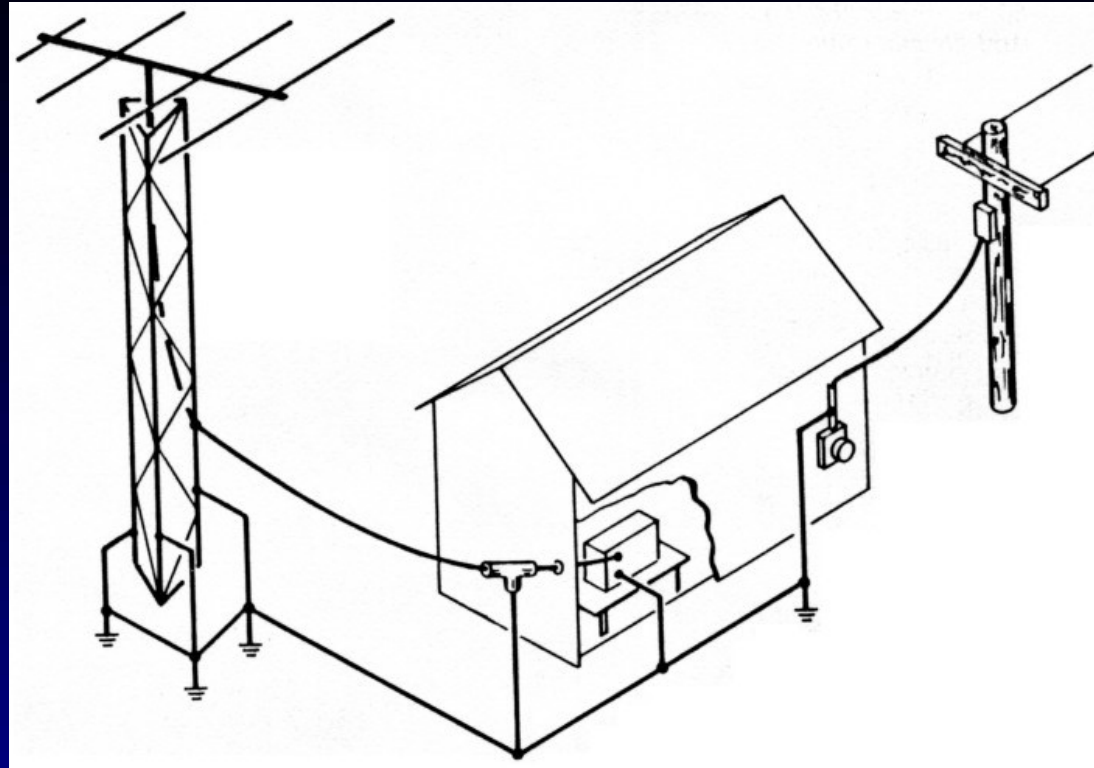
Lightning Protection



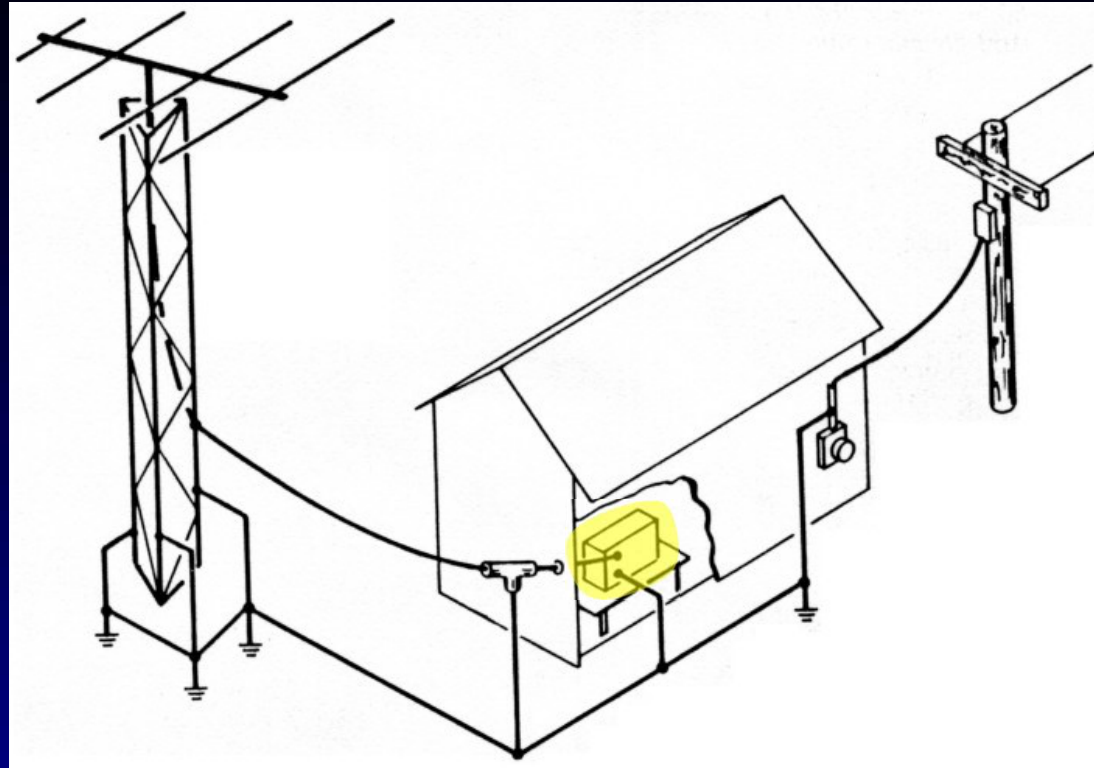
Req. 6: Safety Lightning Protection



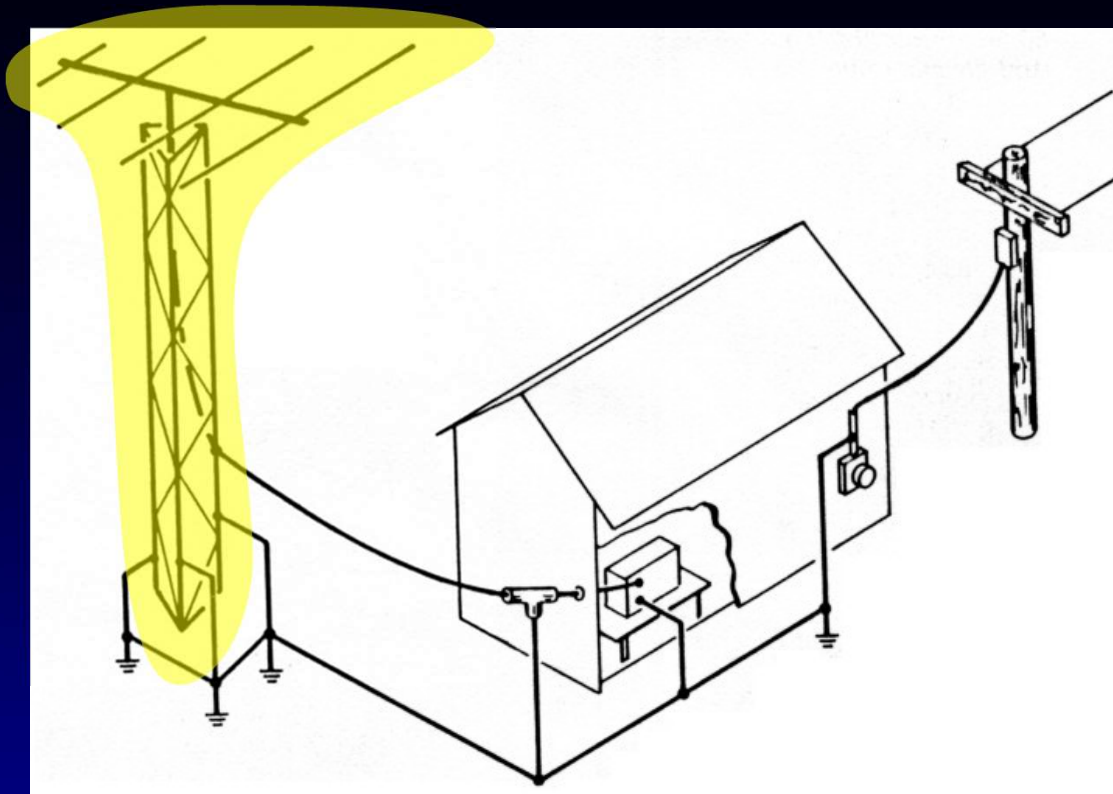
Req. 6: Safety Lightning Protection



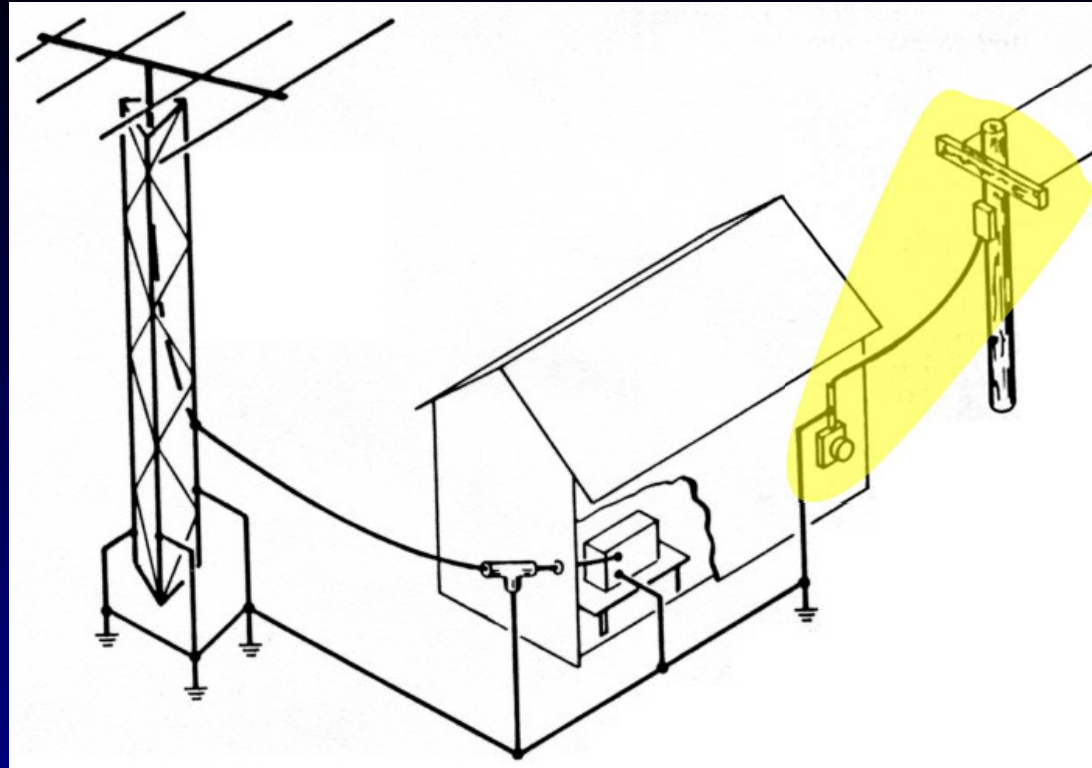
Req. 6: Safety Lightning Protection



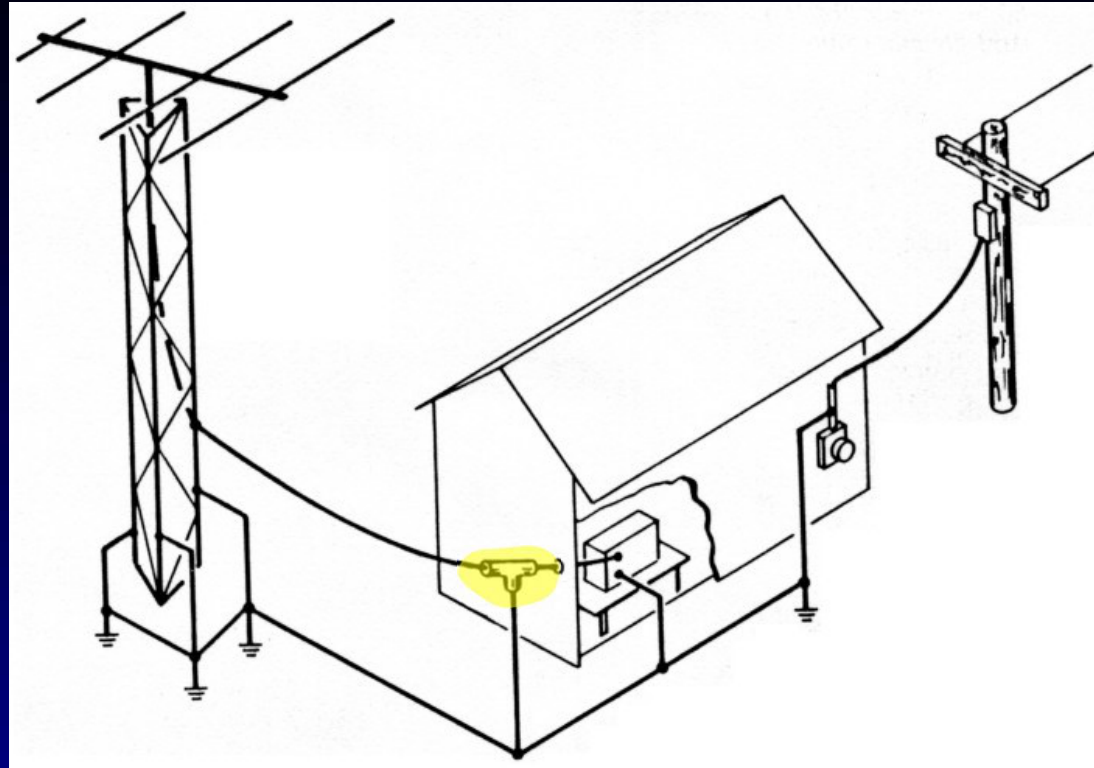
Req. 6: Safety Lightning Protection



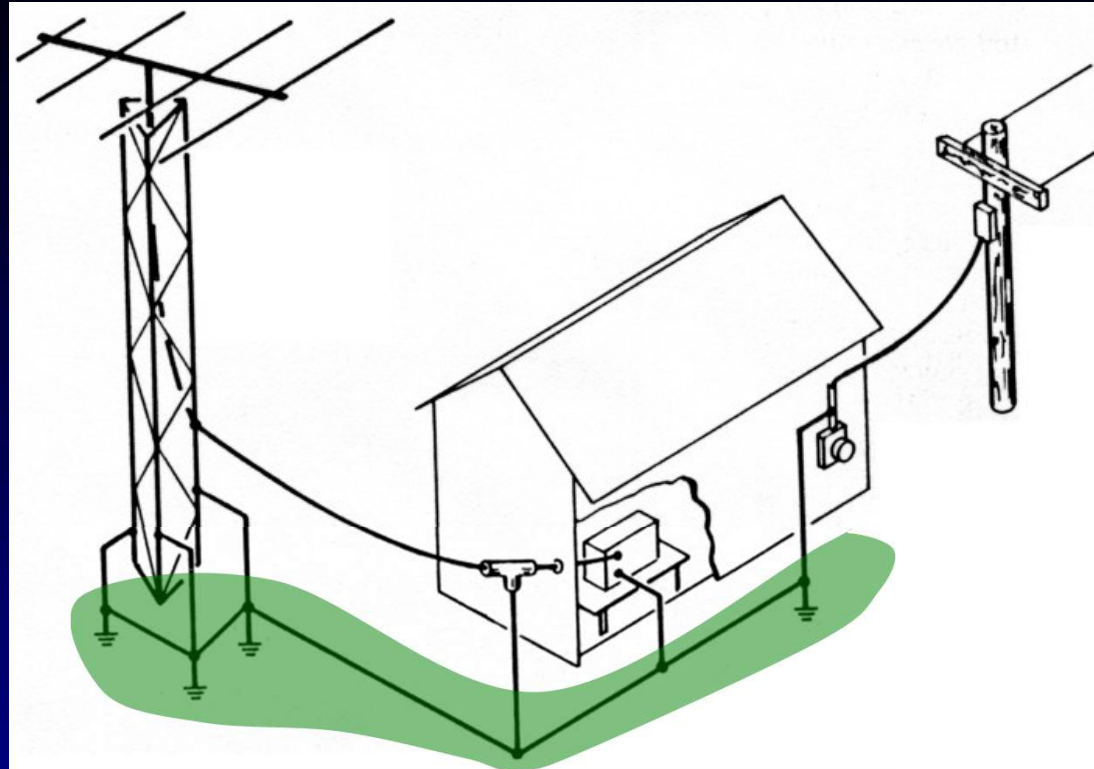
Req. 6: Safety Lightning Protection



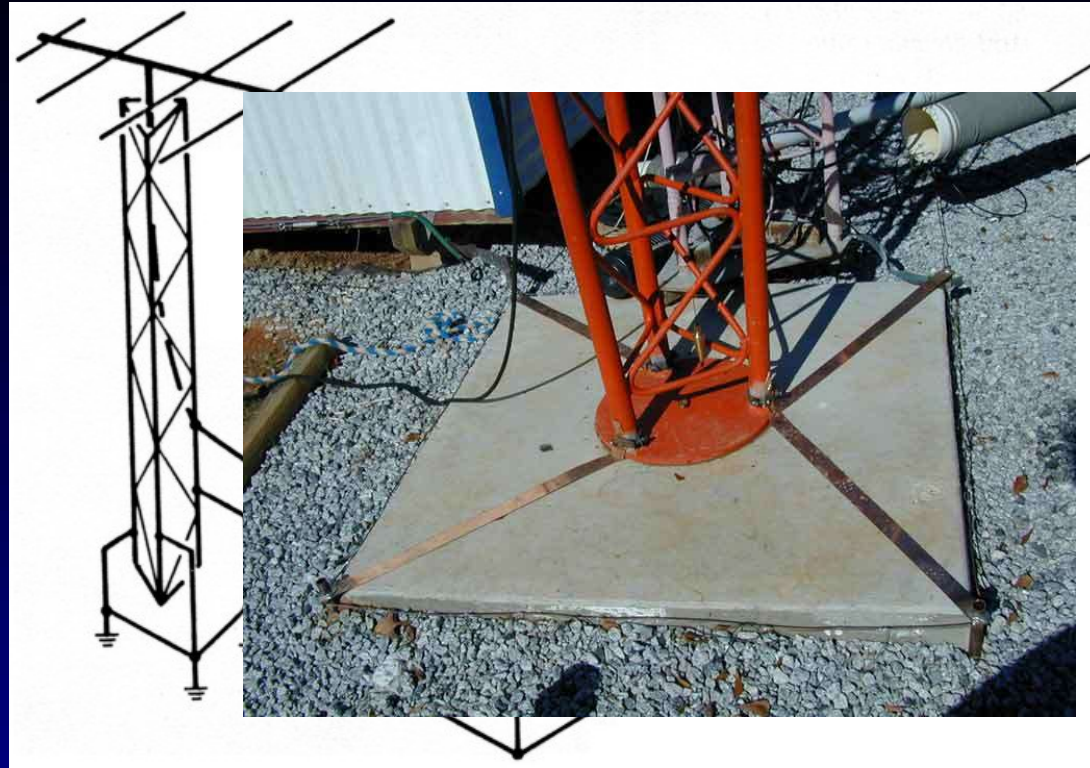
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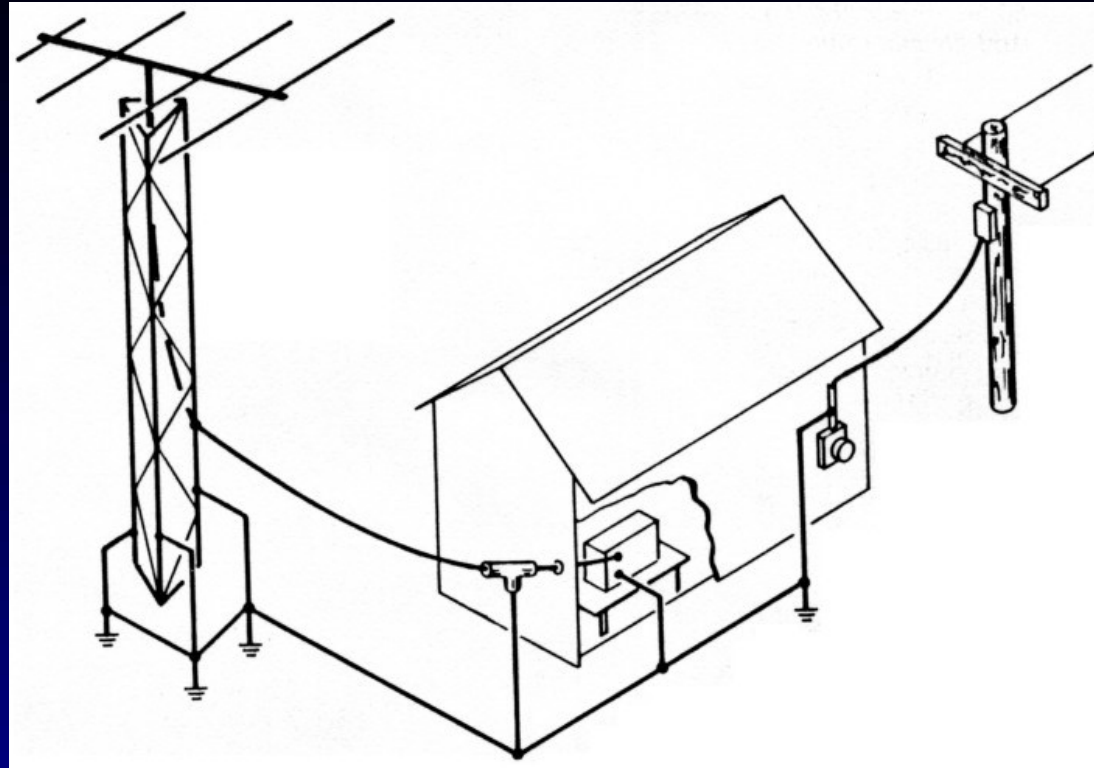
Req. 6: Safety Lightning Protection



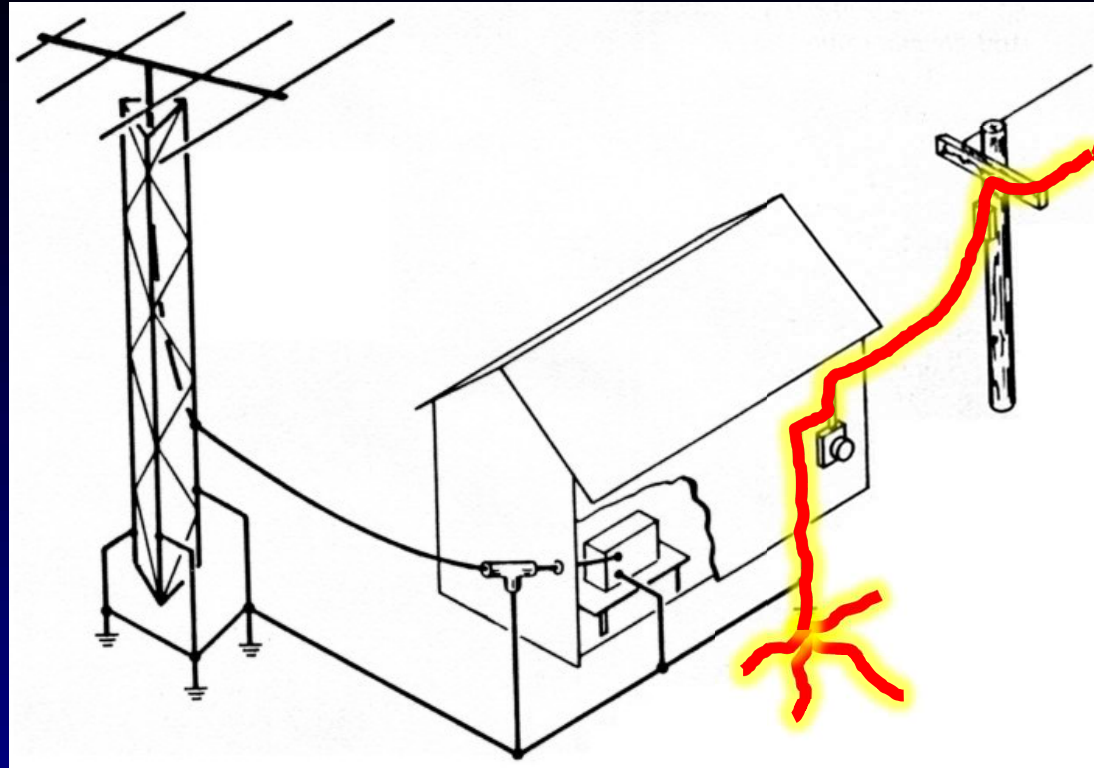
Req. 6: Safety Lightning Protection



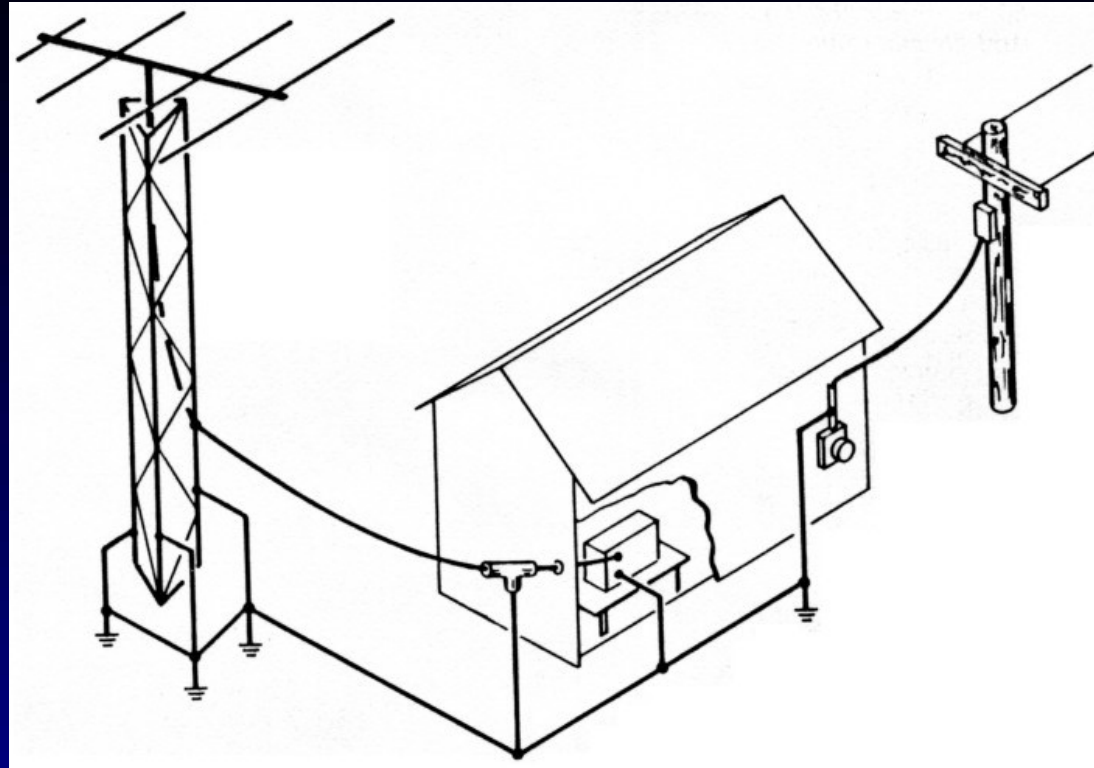
Req. 6: Safety Lightning Protection



Req. 6: Safety Lightning Protection



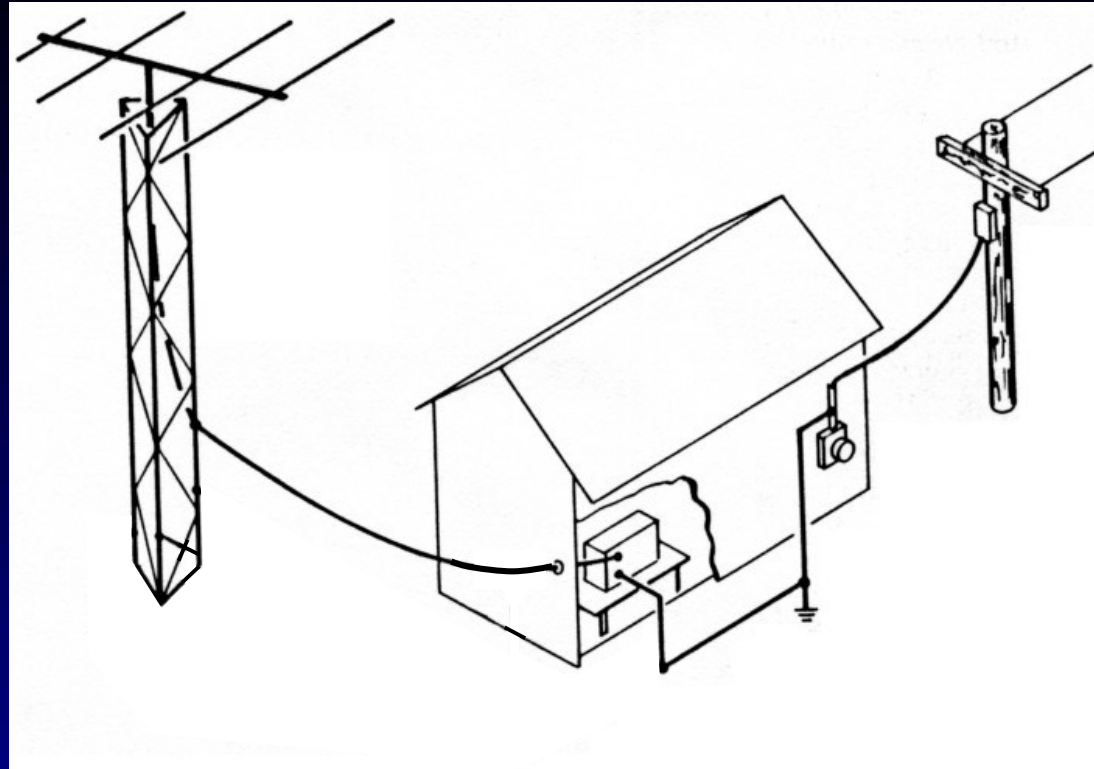
Req. 6: Safety Lightning Protection



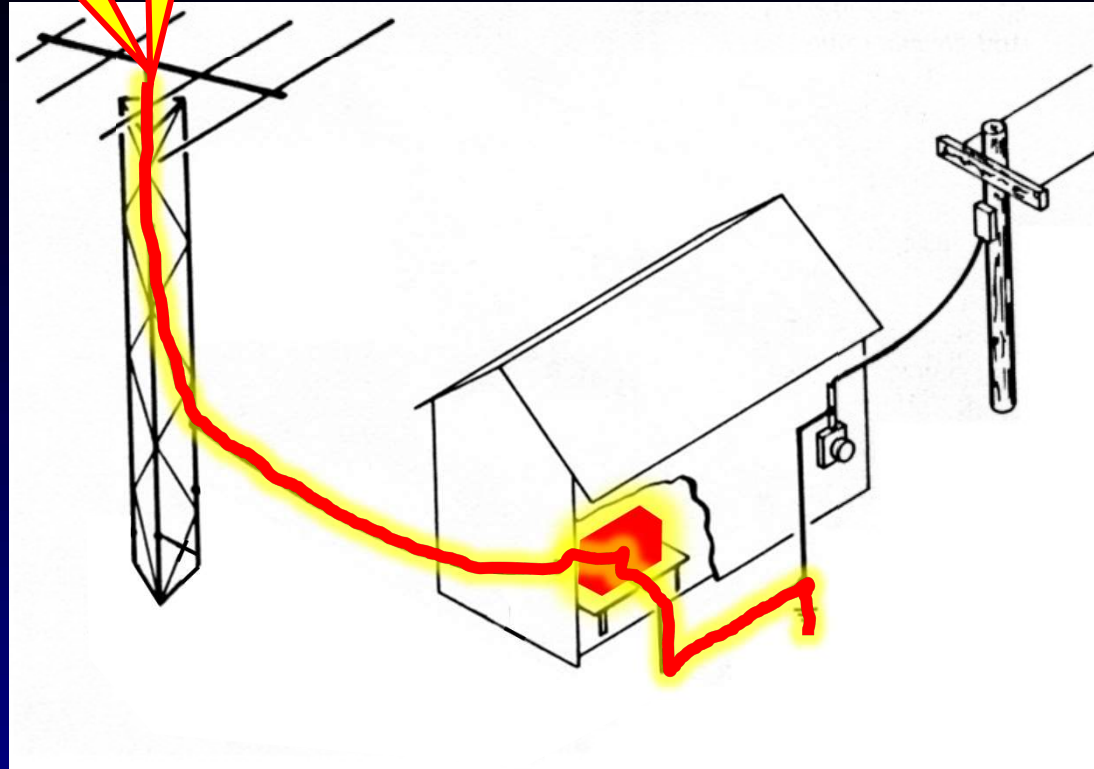
Req. 6: Safety Lightning Protection



Req. 6: Safety Lightning Protection



Req. 6: Safety Lightning Protection



Req. 6: Direct Current Safety

Direct Current Safety



Direct Current Safety



MANUFACTURER	DIE HARD PLATINUM	NORTHSTAR	ODYSSEY	OPTIMA
Cranking Amps (CA)	1,050	1,050	1,050	870

Req. 6: Direct Current Safety

Direct Current Safety



Req. 6: Direct Current Safety

Direct Current Safety



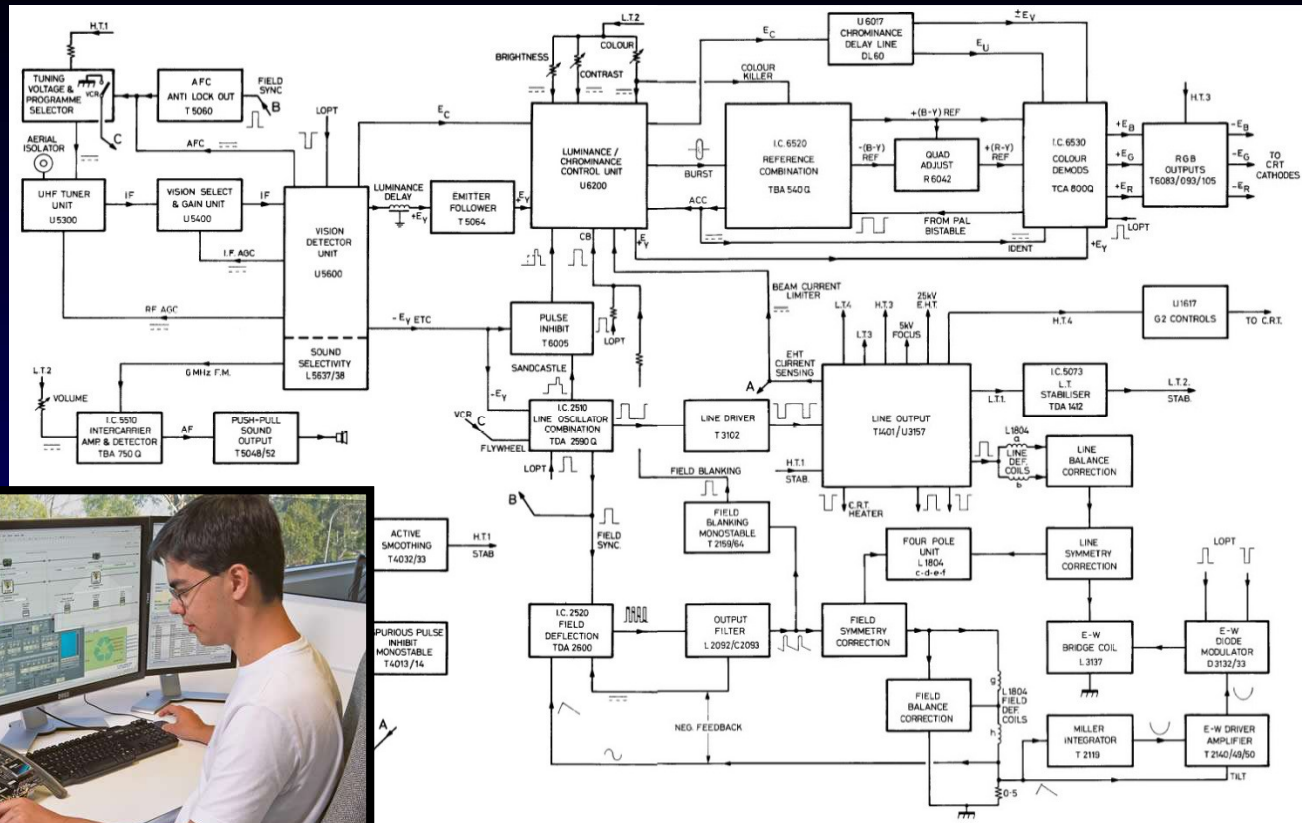


Careers In Radio

Technical

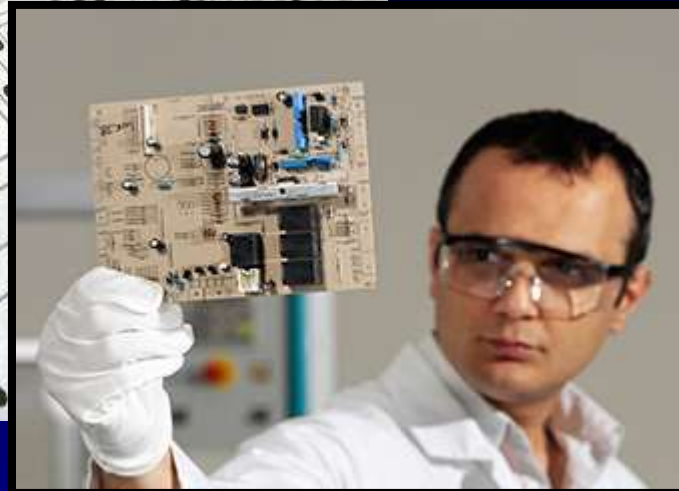
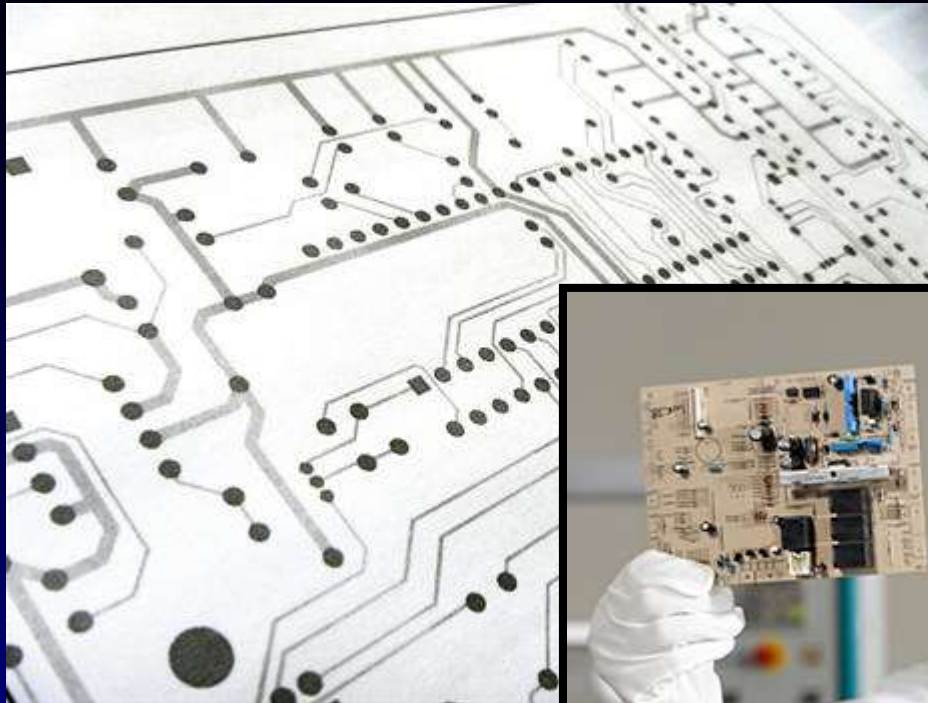
Opportunities

Req 8: Technical Radio Careers



Design Engineer

Req 8: Technical Radio Careers



Design Technician

Req 8: Technical Radio Careers

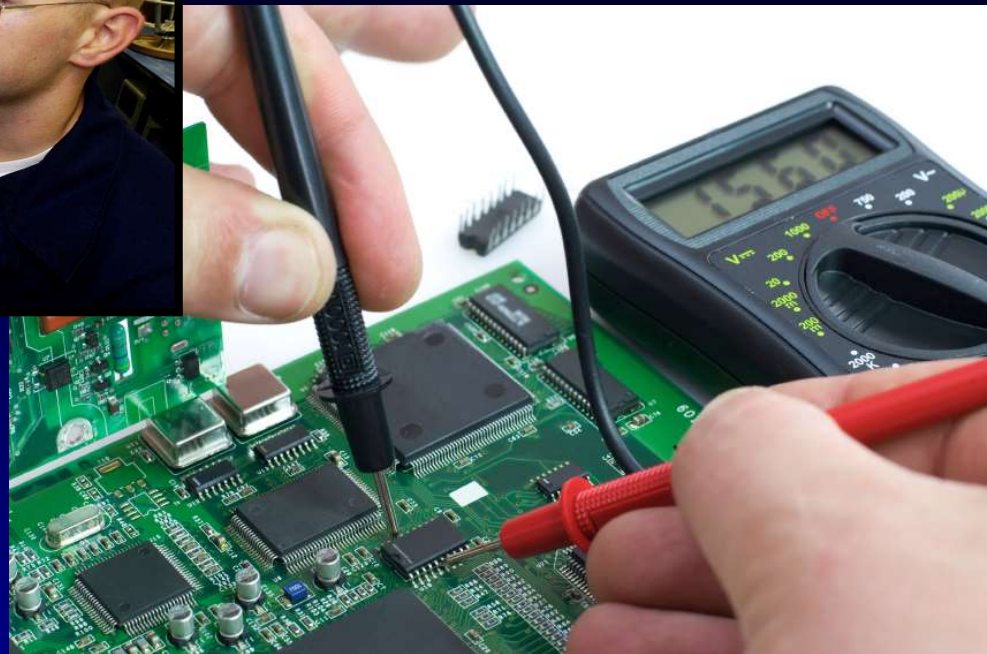


Radio Station Engineers

Req 8: Technical Radio Careers



Electronics Technician





Careers In Radio Broadcasting



Announcers and Radio/TV Personalities



Station Managers

Req 8: Broadcasting Careers



Program Directors

Req 8: Broadcasting Careers



Program Writers

Careers In Radio

Radio Operating

ASCA
K2

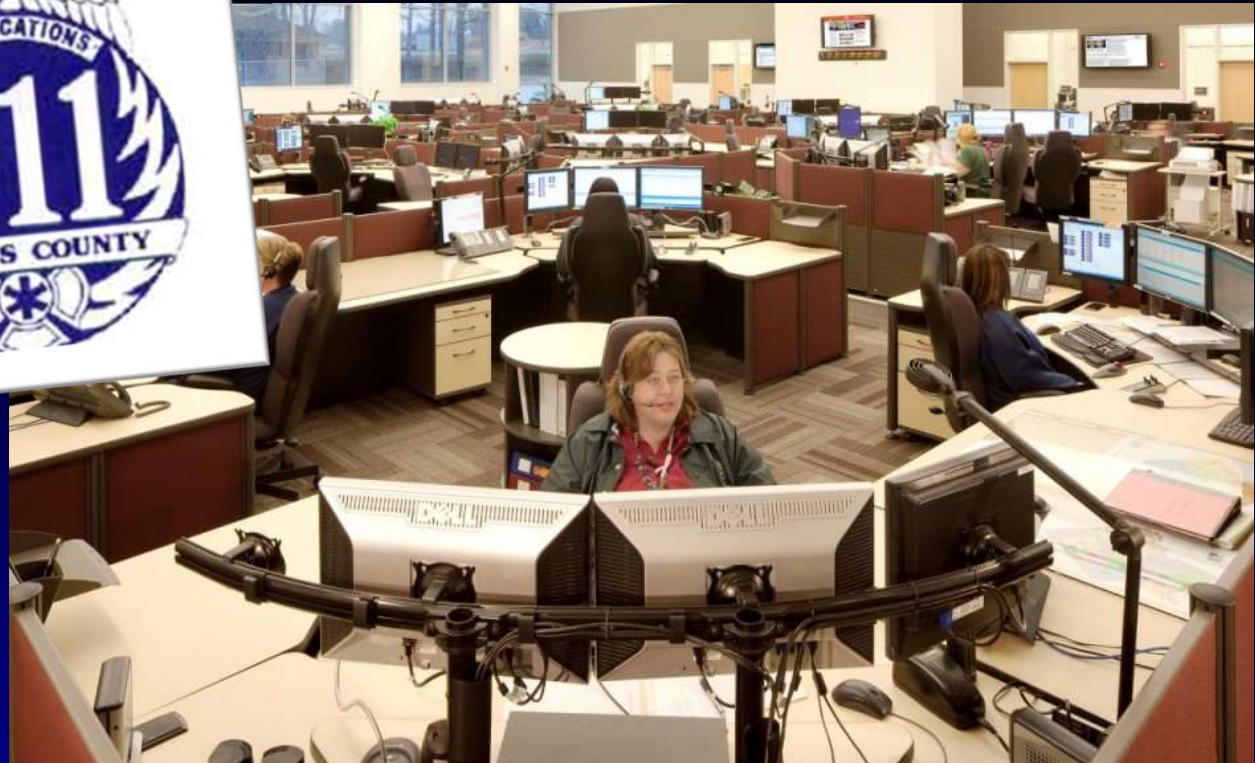


K2B5A

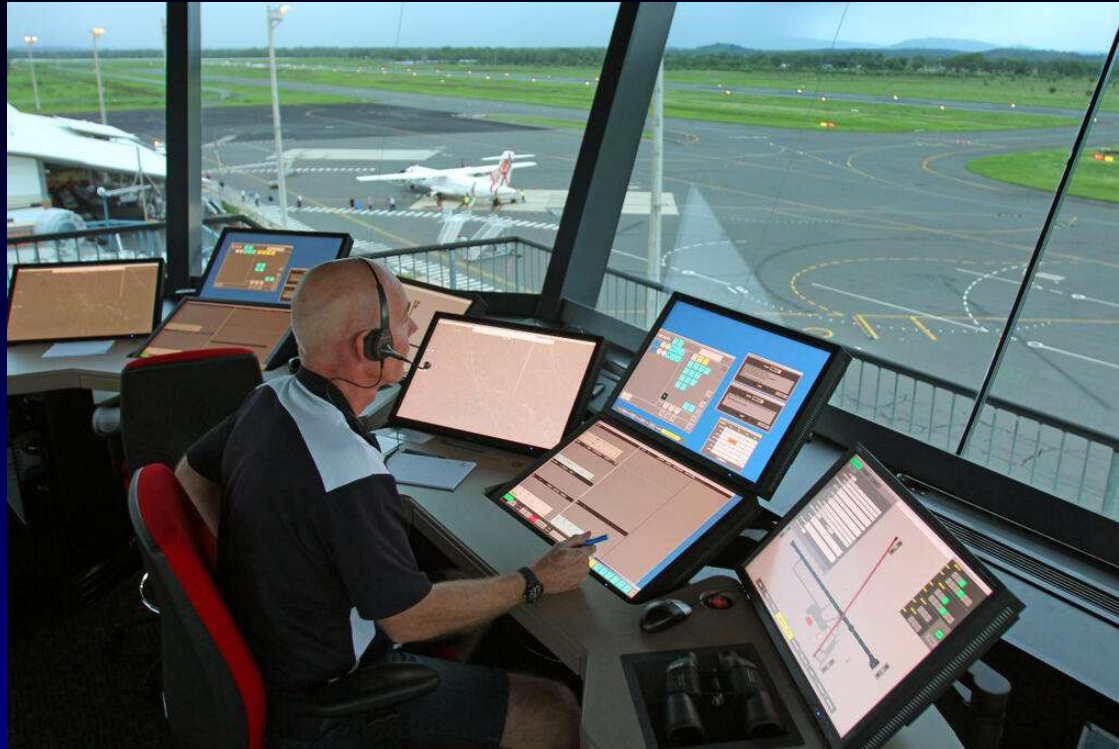


Req 8: Radio Operator Careers

Req 8: Radio Operator Careers



Req 8: Radio Operator Careers



Req 8: Radio Operator Careers



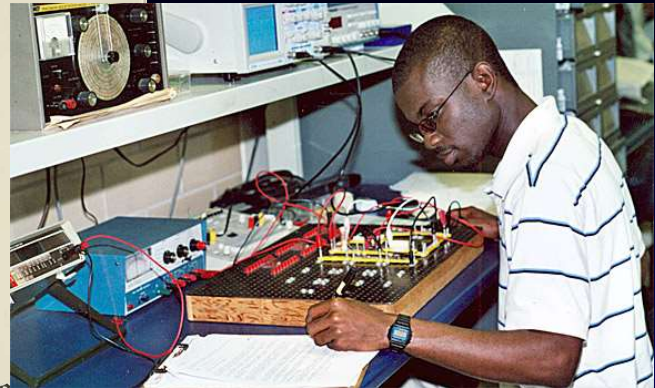
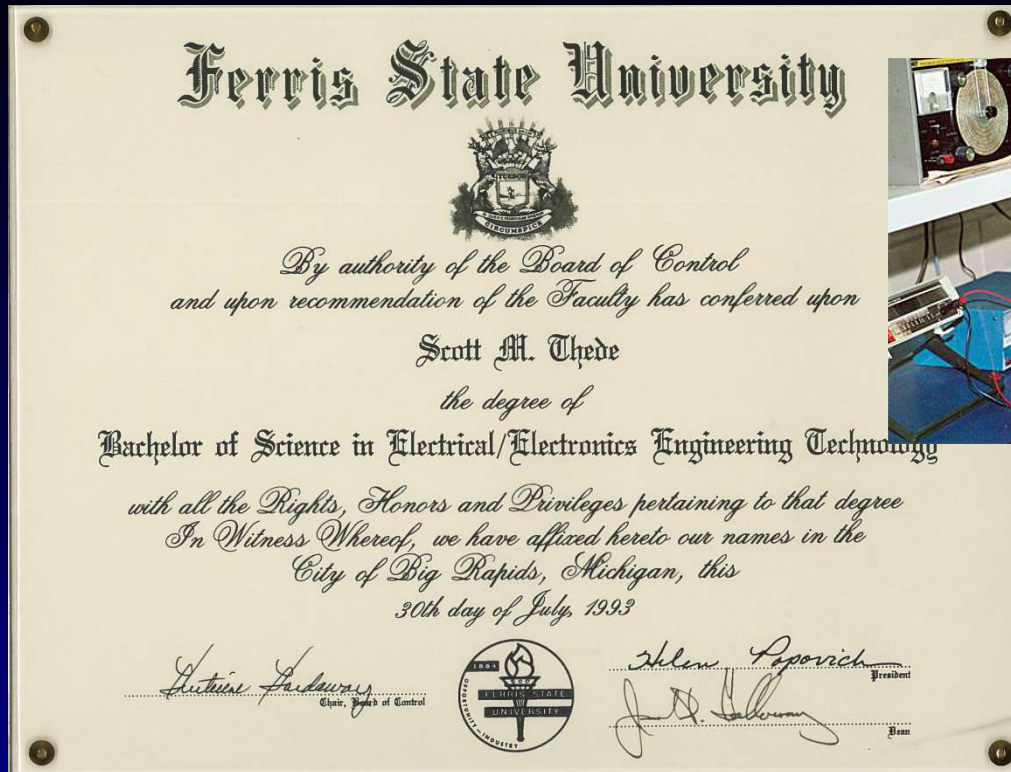
Careers In Radio Education and Experience



Req 8: Education for Radio Careers



Req 8: Education for Radio Careers



K2BSA



Req 8: Education for Radio Careers



K2B5A



Req 8: Education for Radio Careers



SLIDE 23 2

Req 8: Education for Radio Careers

GSBPSA
K2BSA



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SEO Lt/C James M. Milton, JN at
JamesMilton@GSBPS.org to register!

Skills

Basic Powerboat Handling
Using Fire Extinguishers



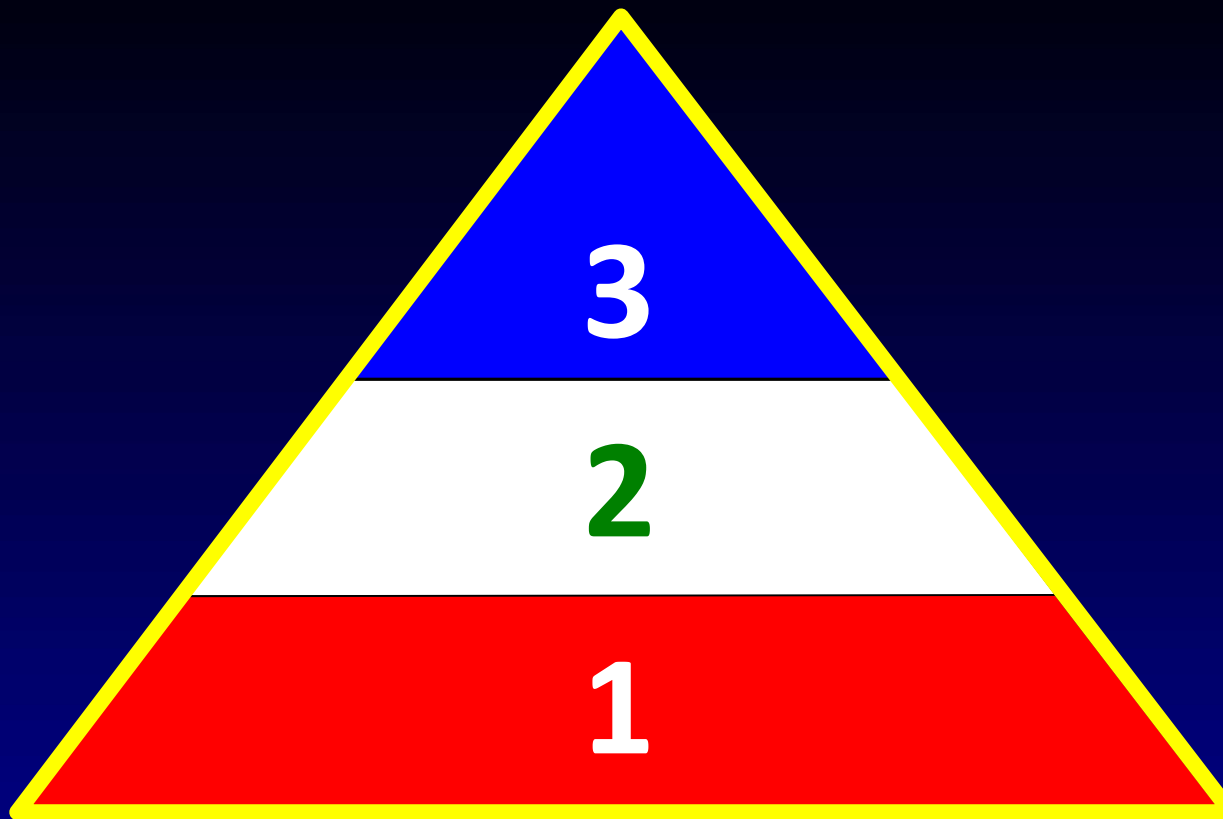
FOR MORE INFORMATION VISIT
OUR WEBSITE AT www.GSBPS.org/boc

The United States of America Federal Communications Commission		
GENERAL RADIOTELEPHONE OPERATOR LICENSE (General Radiotelephone Certificate)		
This certifies that the individual named below is a licensed radio operator and is authorized to operate licensed radio stations for which this class of license is valid. The authority granted is subject to any endorsement placed on this license. The authority granted is also subject to the orders, rules, and regulations of the Federal Communications Commission, the statutes of the United States, and the provision of any treaties to which the United States is a party, which are binding upon radio operators.		
This license may not be assigned or transferred to any other person. This license is valid for the lifetime of the holder unless suspended by the FCC.		
Endorsement: SHIP RADAR ENDORSEMENT		
Licensee: WARREN WEAGANT		Place of Issuance SAN FRANCISCO, CA.
Date of Birth JANUARY 13, 1946	Issuance Date JANUARY 2, 1985	License Number PG-12-25655
Signature of Licensee <i>Warren Weagant</i>		

K2B5A



Req. 9.a.(2): Amateur Radio License Differences

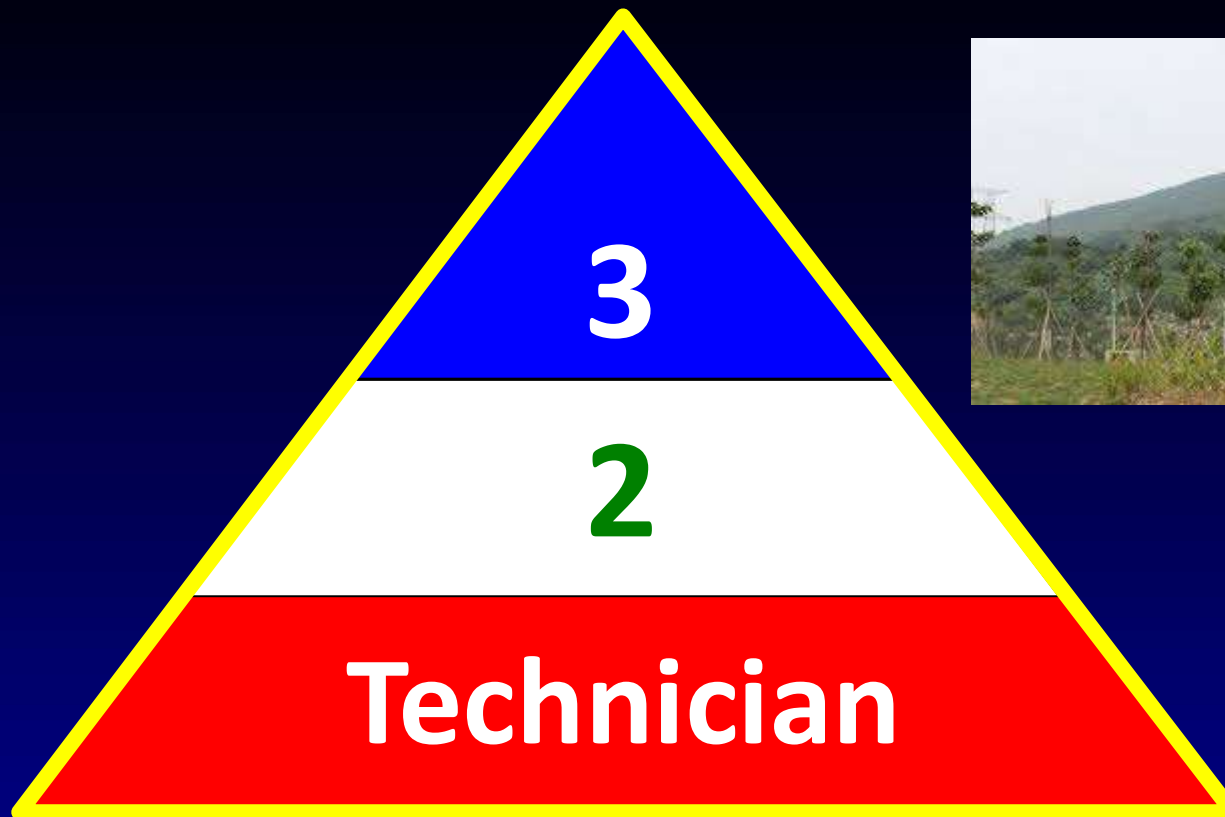


Amateur Radio Licenses

K2B5A



Req. 9.a.(2): Amateur Radio License Differences

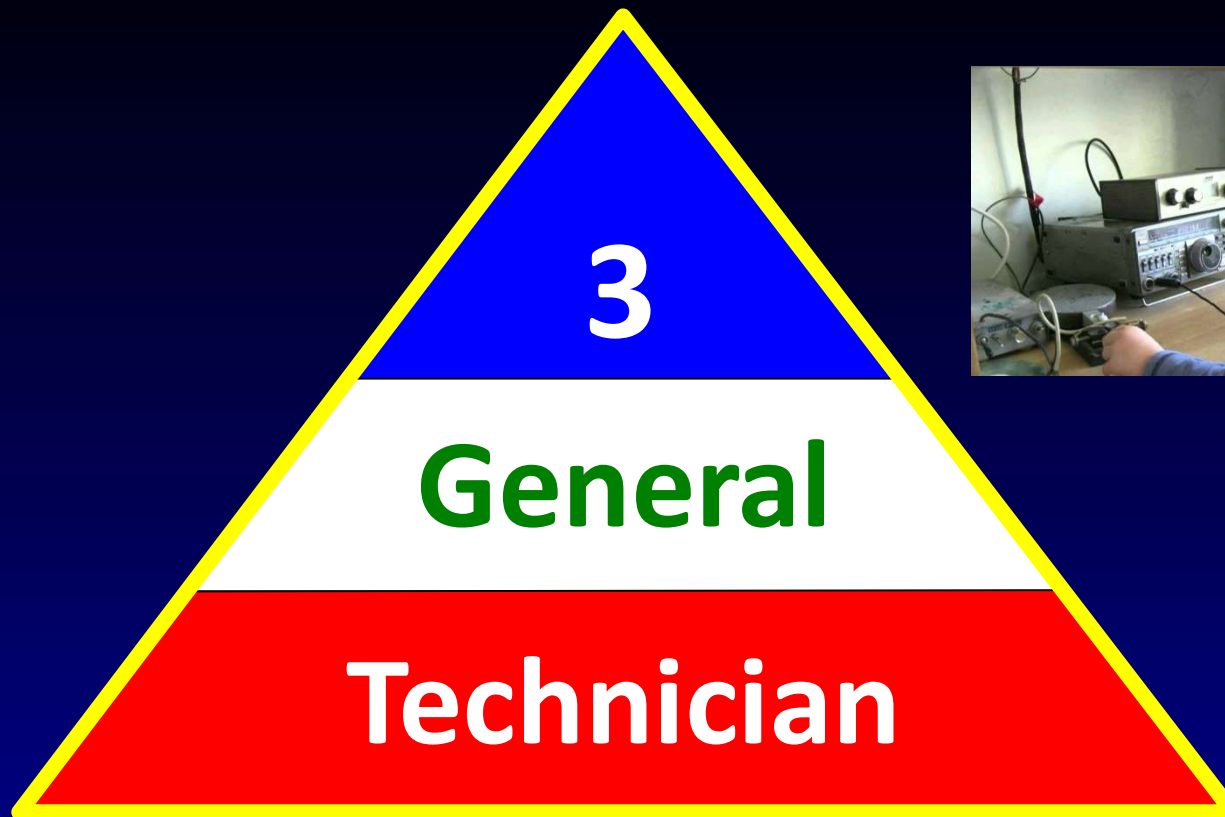


Amateur Radio Licenses

K2B5A



Req. 9.a.(2): Amateur Radio License Differences

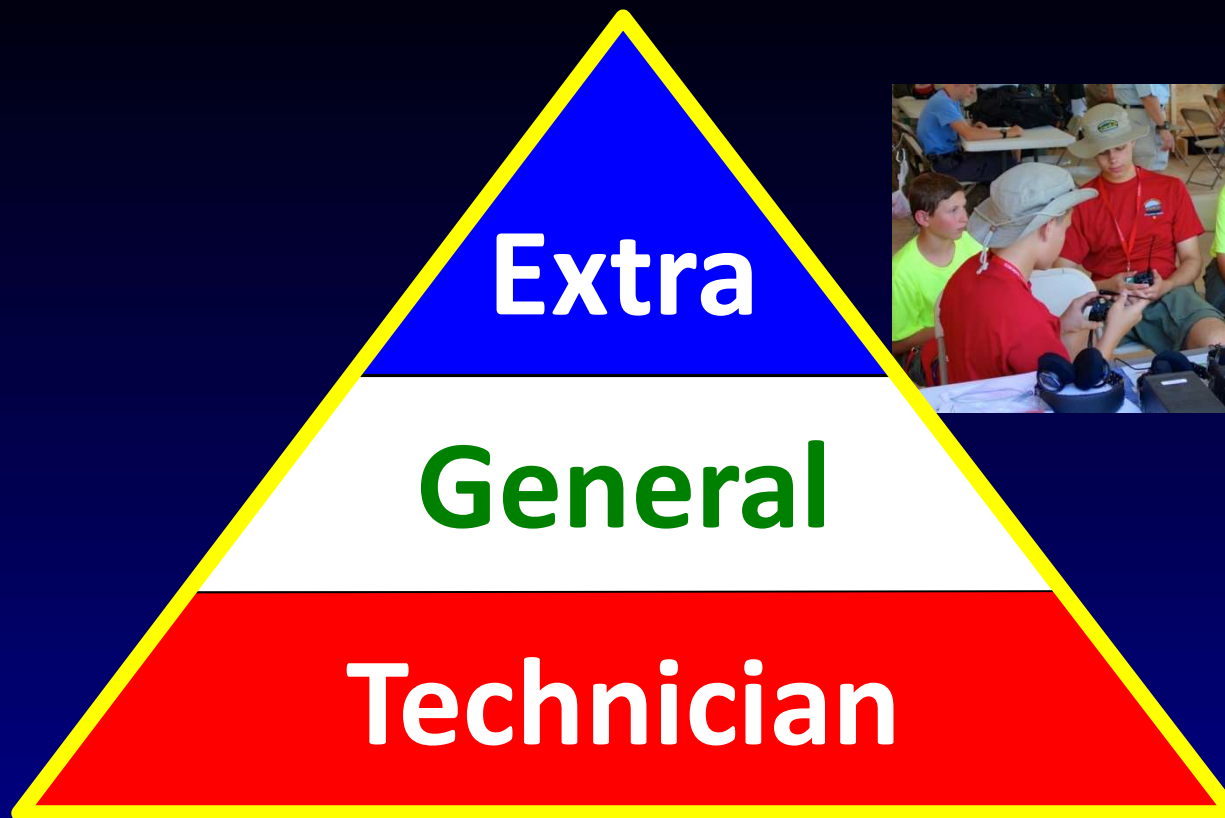


Amateur Radio Licenses

K2BSA

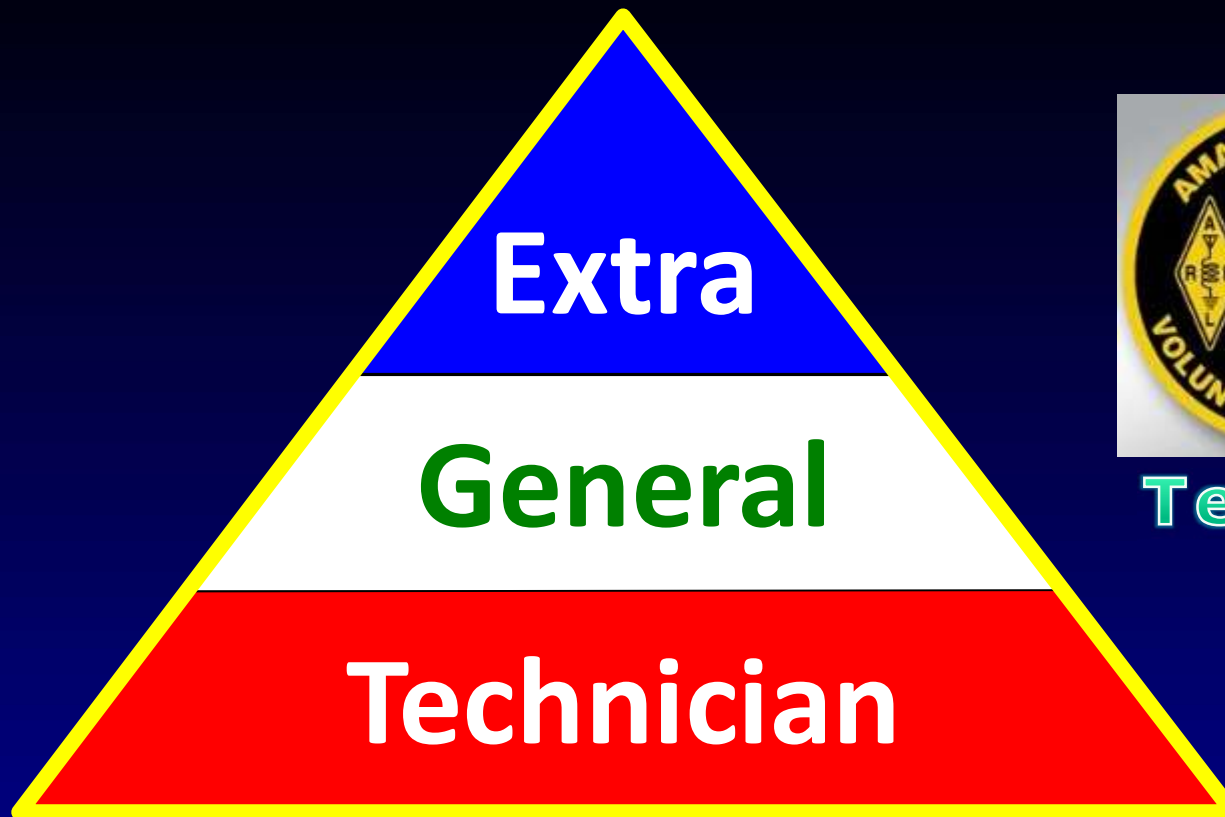


Req. 9.a.(2): Amateur Radio License Differences



Amateur Radio Licenses

K2B5A



Testing

Amateur Radio Licenses

Radio Merit Badge

