



THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

>>>>>>> <https://www.barconline.org> <<<<<<<<

June, July, August Summer 2017

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PRESIDENT'S MESSAGE

It is June already and Field Day is almost here.

Our club will be participating in the [American Radio Relay League \(ARRL\) 2017 Field Day](#) event on the 24th and 25th of June. Field Day is an annual amateur radio exercise, encouraging emergency communications preparedness among amateur radio operators. It is typically the largest single emergency preparedness exercise in the country, with over 35,000 operators participating each year. Field Day is part educational event, part operating event, part public relations event. But most of all, we have a fun and enjoyable time operating the radios. Anyone can attend and participate, licensed or not, club member or not. You can operate a radio (with a control operator present) in making contacts to other amateur radio operators. If you want to listen and not operate, you can help with logging the radio contacts on a computer. We use this opportunity to let everyone try HF. We will have several radios setup.

Our location for Field Day will be the same place as last year, a half mile up the Swan Flat Road. Swan Flat Road is about 30 miles up Logan Canyon just past the State Maintenance station after mile marker 490. Swan Flat Road is suitable for automobile travel. The area is open camping so there will be a few of us that will go up early in the week to claim a spot. Others are welcome who would like to arrive early for some radio camping. We should have a radio set up to use so we can enjoy the airwaves with less man made interference that in the valley.

So here is the Field Day schedule:

Friday

Noon - Those that can, arrive at site to help set up antennas until about 6 PM. It takes about 4 to 6 people to set up the antennas.

Saturday

Morning - Setup remaining antennas and radios. Check everything; radios, antennas, computers, etc.

Noon - Contest starts. Anybody who wants to can get on the air or help with logging contacts. Contest lasts for 24 hours.

1 PM until 3:30 PM - The BARC Ladies' Project

3:30 PM - Bunny Hunt. We will have a short class and demonstration. The bunny will be hidden and anyone who would like to can try to find it. Hunters don't need a license to participate, just listening to the radio.

6 to 7 PM - Pot Luck Dinner. Please bring a large pot luck food item to share (make sure to bring plenty to share--there are lots of mouths to feed). Bring your own chair and plates/cutlery/cups. The Club will provide a pot luck item and drinks.

Sunday

Noon - Contest ends. Start taking down antennas, put stuff away, and clean up the camp site.

Come on up and bring your family, camp chair, mosquito repellent, water (no water at the site). Stay as long as you can, and enjoy the fun of Field Day.

The next club gathering will be on September 7th with the Fall Pot-Luck Social.

Hope everyone will have a fun and safe summer.

73,

Cordell

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UPCOMING 2017 ACTIVITIES

- 24-25 June, Field Day** (in place of **BARC Club Meeting**) up Swan Flats road in Logan Canyon ([More Info Here](#) for the BARC Club or [Here](#) from ARRL)
- 08 July, Cache Gran Fondo** — Lead persons: Howard Trexler/Russ Lekis ([Info](#))
- 12 July, 7:30 PM - ARRL Rocky Mountain Division Net** 147.200/IRLP Node:9871
- 15 July, 8:00 AM — RACES HF Net** 3920 KHz
- 15 July, 3:00 PM - ARRL VEC License Test Session** @ BATC on 600 West, Logan Room 840. This test follows the one day Technician License class. ([More Info Here](#))
- 19 July, 7:00-9:00 PM — Cache County ARES meeting** at the Sheriff's Office
- 09 Aug, 7:30 PM - ARRL Rocky Mountain Division Net** 147.200/IRLP Node:9871
- 12 Aug, Randy Wirth Half Century** bicycle ride — Lead Persons: Stan Laughlin & Scott Boyer ([More Info Here](#))
- 16 Aug, 7:00-9:00 PM — Cache County ARES meeting** at the Sheriff's Office
- 17 Aug, 8:00 PM RACES VHF Net** 449.650 pl 100.0 Mt. Pisgha 147.180 Snowbird 147.20 IRLP
- 26 Aug, - Top of Utah Half Marathon** — Lead Person: Laurie Littledike ([Info](#))
- 07 Sep, 6-9 PM—BARC Pot Luck Fall Social & LOTOJA Mtg** @ the Stake Center Pavilion located at 360 E 450 N Providence, UT. This is the club meeting for September
- 09 Sep, LOTOJA bicycle race** — Chair Persons: Kevin & Tyler ([More Info Here](#) or [Here](#))
- 16 Sep, Top of Utah Marathon** — Lead Person: Laurie Littledike ([More info here](#) or [Here](#))

For more calendar information see the barconline.org/calendar

Local Radio Nets:

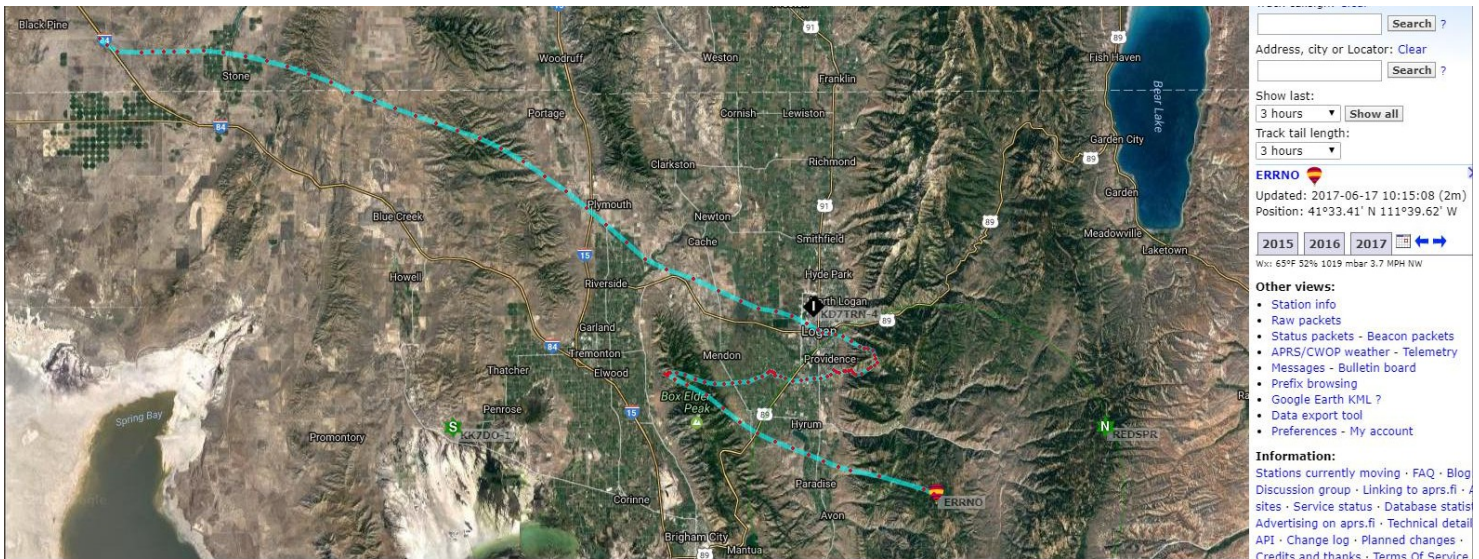
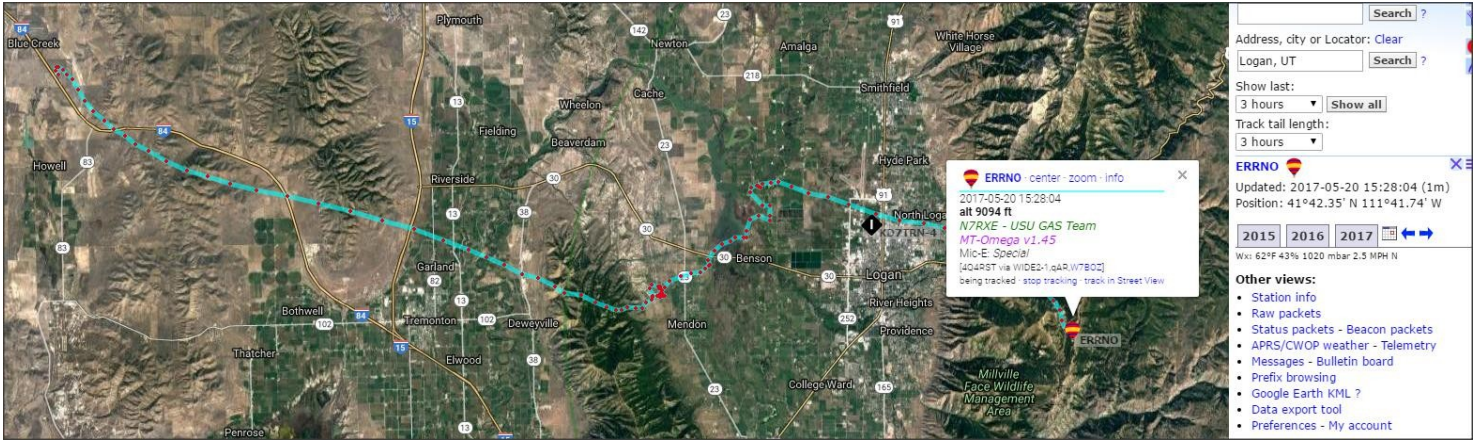
The **Weekly BARC net** is for BARC members and anyone else that would like to check in, held **every Tuesday night at 9:00 P.M.** local time on the Mt Logan BARC Repeater and Linked Systems (146.720)

The **ARES** monthly net is the **1st Tuesday** of each month on 146.720 at **8:00 P.M.** All ARES members are invited to check in and participate

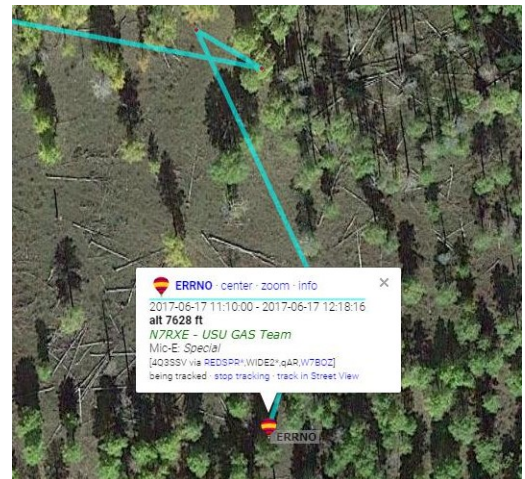
The **BARC Ladies Net** is every **2nd and 4th Tuesday** at **8:00 P.M.** on 146.720 and all licensed lady amateur operators are invited to check in

Recent Balloon Launches

A couple of balloons have been launched recently! The first one was on May 20th and the second one on June 17th. Both have been recovered, the first one landed just behind Logan peak at an altitude of 9094 feet and in a tree. The first team that tried to recover it was stopped by drifts of snow they were not prepared to tangle with, but later it was retrieved.



The second one was not as hard to get too, it was only at 7628 feet, the recovery team did have the help of the property owner so they could get through the locked gates and get to it. These maps are the tracks that were broadcast and the paths that they traveled by the balloons. Thanks to all those that helped with these projects, there were many that followed the tracking and helped to retrieve the payloads.



The ARES E-Letter for April 19, 2017

Local and State Drills and Exercises Roundup

Alabama Starts New Rapid Response Drill Program

The ARRL Alabama Section is initiating a new program of Rapid Response Drills (RRD) meant to test the portable capabilities of operators on a county by county basis. The program is in response to the need for more simulations that accurately represent real world conditions in an emergency/disaster response. The key to the drill is to have stations/operators under the Incident Command System operating remotely, portable/mobile. Stations operate "off the grid" and conduct the drill using VHF frequencies without the use of local repeaters; operating simplex is another way to test the capabilities of traffic handling as close to emergency/disaster conditions as possible.

Each county EC is encouraged to select at least one location in their county that has the potential to be a "ground zero" for a local emergency/disaster event. The goal is to set up a station there and begin attempting contacts. This effort initially starts with direct contacts and then other contacts by relay, again testing the capabilities of the operators. Once the VHF net has been established and stations have successfully mapped the coverage area for their direct contacts (contacts by relay are in theory unlimited) the drill can then migrate to HF frequencies. The move to HF is also based on real world experience as once the situation has been stabilized, contact outside the affected area is needed. The Rapid Response Drill encourages operators to make their VHF contacts with the Incident Command Net Control station(s) and then using HF to attempt contacts outside their home operational area. The VHF frequency 146.520 MHz -- the National Calling Frequency -- is the initial or primary frequency; for HF operations, the 3.965 and 7.290 MHz frequencies were selected.

This is a developing program and the first drill was conducted on Saturday, April 15, 2017. There were some outstanding operations, successes and frustrations, as was expected. In the coming weeks, the Section leadership will be surveying ECs across the state to record lessons learned, gather success stories and capture opportunities for improvement. The instructions for this initial drill were intentionally sparse leaving more of the details to the ECs so the event could be tailored to their local conditions. In Alabama there are coastal communities, urban centers, rural farm land, rivers, lakes, earthquake zones, nuclear power stations, major rail lines and etc., so the operating environments are quite diverse.

Another important component was the time frame for the exercise. It was chosen to have the event limited to two hours because as with all emergencies/disasters the first few hours are the most chaotic. Also, limiting the time commitment for a drill allows more focus and participation by local operators.

Prior to the drill, operators were introduced to the rapid response program idea during presentations at hamfests across the state and social media sites dedicated to Amateur Radio. One topic from these introductions was Go-Kits and what it means to operate off the grid, what does *portable* mean, and how "rustic" should the drill be in terms of equipment. The answer to those questions was, of course, "it depends." The RRD presents the challenge: what gear to use and where to set up are the two biggest questions that face communicators in any disaster. For the RRD we encourage each county EC to make those decisions either before the drill started or immediately after.

Alabama is committed to a few more Rapid Response Drills this year and each one will be building on

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the previous exercise. The goal is to create a flexible, reliable and nimble skill set among our operators who can respond in the first moments after the onset of a disaster and begin communicating accurate, actionable information in service to our community. --[ARRL Alabama Section Manager JVann Martin, W4JVM](#)

Rural Northern Florida ARES Group Supports Mass Casualty Exercise

A small, but vitally active Madison County, Florida, ARES group was asked to participate in a mass casualty exercise this month. Madison county is a rural county in the state's Big Bend region. The role of ARES was to establish two-way radio communications between the County Dispatch Center and the Lee School where an alternate care facility would be established in a disaster. The scenario was a tornado that had overturned a bus near the intersection of Hwy 255 and Interstate I-10 south of the town of Lee, Florida.

At 3 PM, ARES operators began moving to various staging areas awaiting the "Code Red" telephone alert, which was issued at 5:53 PM, received by telephone with the recorded request for radio operators to check-in to the Lee repeater on 145.19 MHz. Madison County EC Pat Lightcap, K4NRD, commenced the initial net, calling for check-ins. Five members who remained at the staging areas checked in. At 5:57 PM, a call was received from county Emergency Manager Alan Whigham, KI4IFH, requesting operators and communications service at the Lee School care facility and the County Dispatch Center. At 6:20 PM, EC Lightcap established UHF communications at the Dispatch Center by employing a handheld and accessing the 442.000 MHz repeater on the North Water Tower in downtown Madison. That system was proved to link Dispatch to the Lee School via a crossband mobile repeater in the school parking lot to Bob Downey, WA1TCC, in the school who was using a handheld radio on VHF. By 6:49 PM, all players left the school; there was no additional need for radio communications. The exercise was concluded and the ARES members were demobilized, standing down.

Lessons Learned

1. While waiting for the exercise to begin, ARES members evaluated proposed communications paths and links, discovering gaps in coverage. They found that signals transmitted from within the Lee School on VHF were attenuated, rendering communications challenging -- the school was constructed of metal. The group was, however, successfully able to contact radio amateurs in the state capital of Tallahassee, Valdosta (Georgia), Live Oak, Perry, and Lake City (Florida) to confirm access to hospitals in those cities. FM simplex/mobile operation provided reliable links from Dispatch to Lee School with relays only requiring three vehicles.
2. Transmitting signals out of the Dispatch Center on a handheld to the Madison UHF repeater was also challenging. The plan had been to use a crossband mobile repeater to send UHF to the car and then VHF to the Lee repeater, which was near the school. The equipment to do this was not available as had been expected.
3. Exercise players at the school did not seem to know why ARES was there -- no message was generated from the school. Better coordination in the future is needed.
4. Amateur Radio operators from eight counties were involved, with three counties represented on-site, representing excellent cooperation and coordination.
5. Antennas on-site at the school and Dispatch need to be researched to see if they are available for Amateur use on short notice. - *Madison County (Florida) ARES After Action Report (AAR)*

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The ARRL Letter for May 25, 2017

Hamvention Gets Off to a Promising Start at Its New Venue

Official attendance numbers are not yet in, but Hamvention® 2017 drew a happy and enthusiastic crowd to its new venue at the Greene County Fairgrounds and Expo Center May 19-21 in Xenia, Ohio. The sponsoring Dayton Amateur Radio Association ([DARA](#)) was forced to relocate the event after the dilapidated Hara Arena in Trotwood closed for good last summer. Traffic jams were the order of the day on opening day, however, with those eager to experience Hamvention's first Xenia outing waiting, or up to 2 hours in traffic. Traffic flow smoothed out on Saturday and Sunday. Heavy rain on Saturday didn't dampen spirits, although it made things a bit dicey in the flea market. ARRL Contributing Editor Ward Silver, N0AX, a Hamvention veteran, gave the show high marks.

"Overall, I would give it a 9 out of 10, just due to the [Friday] traffic and some mud," he said. "I had a great time, and I think a large collective sigh of relief went up from everybody that it all worked out as well as it did -- rain and traffic issues notwithstanding." Silver said DARA did "a fantastic job," in moving the show from Trotwood to Xenia. "I look forward to many more years of Hamvention. They saved it with this performance." Silver noted that Hamvention had renamed several of the large halls on site after such notables as Hertz, Tesla, and ARRL co-founder Hiram Percy Maxim.

"I liked the way they had the buildings clearly labeled," Silver said, "so you could tell who was inside."

QST Managing Editor Becky Schoenfeld, W1BXY, felt Hamvention 2017 went well, by and large. "I visited a lot of forums and generally saw very good attendance," she said. She said ARRL's "Ham Radio Makers and Hackers" forum drew a capacity crowd. "Attendees seemed to be pleased with the number and variety of food trucks." But Schoenfeld and others also remarked on the warm and steamy atmosphere in the exhibit halls on Friday; cooler weather made things more comfortable on Saturday and Sunday.

The ARRL Expo remained busy throughout the 3-day international gathering, which featured, among other things, a meet-the-author table. Visitors also took the opportunity to meet with League Board members and staffers as well as to stock up on new publications and ARRL Field Day gear.



The ARRL team at ARRL Expo. [Bob Inderbitzen, NQ1R, photo]

More than 100 turned out for the ARRL Member Forum, where moderator and ARRL Great Lakes Division Director Dale Williams, WA8EFK, encouraged attendees to build something, mentor a young person, become a volunteer examiner, and contribute to Amateur Radio in some meaningful way.

Keynote speaker and ARRL President Rick Roderick, K5UR, offered members more information about the revamping of the ARRL Official Observer program, prompted in part by the FCC's closing of several field offices and cutting staff.

"We will be retraining OOs," Roderick told the forum. "Instead of focusing on individual offenses by hams, we will focus on patterns of offenses, things that happen routinely. Once we observe and establish a pattern of offenses, then the FCC may become involved."

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ARRL CEO Tom Gallagher, NY2RF. [Bob Inderbitzen, NQ1R, photo]

Roderick also talked about possible changes to entry-level licensing, assuring those on hand that a new or revised entry-level license would not be "dumbed down" but redirected toward privileges that the "new generation" of hams actually want. He also challenged forum attendees to approach potential new hams with activities and information that they will find interesting.

The Hamvention Youth Forum, moderated for her 30th year by Carole Perry, WB2MGP, attracted a large crowd on Saturday morning to hear some of Amateur Radio's best young minds present on a variety of topics.



RBN aggregator software developer Dick Williams, W3OA (left), speaks with HamSCI's Nathaniel Frissell, W2NAF.

The HamSCI citizen science team reported "[a successful weekend](#)" at Hamvention, with a booth in the ARRL Expo area, where they discussed the HamSCI mission, upcoming experiments, and ways ham radio operators could participate in HamSCI activities, including the upcoming Solar Eclipse QSO Party ([SEQP](#)). On Saturday, HamSCI presented an ARRL-sponsored forum about HamSCI research and activities.

Schoenfeld said Hamventioners seemed pleased with the choice of cuisine. "Over the course of the weekend, many Hamvention attendees commented on the variety of food choices that had been available, from 'walking tacos' and corn dogs, to pork chop sandwiches and local sausage," she said.



The Hamvention flea market. [Photo courtesy of The SWLing Post]

Products debuting at Hamvention included the FLEX-6400/6400M and FLEX-6600/6600M from FlexRadio Systems; the KPA1500 1,500 W amplifier from Elecraft; the IC-7610 HF/50 MHz transceiver from Icom; a new line of microphones from INRAD, and new antennas from MFJ, Momobeam, and SteppIR. The August issue of QST will include a roundup of new products.

"Xenia was a significant upgrade over Hara Arena," noted contester and Hamvention regular Kirk Pickering, K4RO, told ARRL. He said the large, comfortable forum rooms were far better than those available at Hara

Arena. Silver pointed out that the new arrangement meant no "QRM" from adjacent forums.

"I really preferred the county fair atmosphere over Hara and am already looking forward to next year," Pickering added. "I felt good about the new venue and think that DARA has found a nice home for Hamvention. Major kudos to DARA for pulling it together."

ARRL Marketing Manager Bob Inderbitzen, NQ1R, compiled some short GoPro videos: [The Faces of 2017 Hamvention](#) and [A Walk through 2017 Hamvention](#).

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Spring Section Manager Election Results Announced

Northern New Jersey Section ARRL members have elected a new Section Manager, **while members in Utah have re-elected their Section Manager for another 2-year term.** Ballots for contested seats in the spring election cycle were counted on May 23 at ARRL Headquarters.

In Northern New Jersey, Rob Roschewsk, KA2PBT, of Washington, outpolled incumbent SM Steve Ostrove, K2SO, 399 to 307 votes.

Roschewsk has been licensed since 1982 and is a computer server/network engineer. In his candidate statement, Roschewsk said his goal is "to promote the diverse facets of Amateur Radio, with a special focus on youth activities, building-making, contesting, and public service."



Ostrove has been the Northern New Jersey Section Manager since September 2016, when he was appointed to complete the remaining term of Rich Krohn, N2SMV, who stepped down mid-term.

In Utah, incumbent SM Mel Parkes, NM7P, was re-elected to a ninth consecutive term. In a very close race, Parkes received 351 votes, and Pat Malan, N7PAT, of South Jordan, received 332 votes. Parkes has been the Utah Section Manager since 1999.

Elsewhere, in the West Texas Section, H. Dale Durham, W5WI, of Buffalo Gap was an uncontested nominee for the SM position. He has been serving as Section Emergency Coordinator under current Section Manager Ron Harden, KB5HGM, since 2015, and as Assistant Section Manager since 2016. Harden did not run for a new term after serving since 2015.

These incumbent Section Managers were unopposed in this election cycle and were declared elected: Marty Pittinger, KB3MXM (Maryland-DC); John Bigley, N7UR (Nevada); Peter Stohrer, K1PJS (New Hampshire); Bob Beaudet, W1YRC (Rhode Island), and Dan Pruitt, AE6SX (San Joaquin Valley).

All new terms of office begin on July 1.

Questions for The Technician Class License

1. (T1A13) What is the FCC Part 97 definition of telecommand?
 - A. An instruction bulletin issued by the FCC
 - B. A one-way radio transmission of measurements at a distance from the measuring instrument
 - C. A one-way transmission to initiate, modify or terminate functions of a device at a distance
 - D. An instruction from a VEC

2. (T2C02) What is one way to recharge a 12-volt lead-acid station battery if the commercial power is out?
 - A. Cool the battery in ice for several hours
 - B. Add acid to the battery
 - C. Connect the battery in parallel with a vehicle's battery and run the engine
 - D. All of these choices are correct

3. (T3A10) What may occur if data signals propagate over multiple paths?
 - A. Transmission rates can be increased by a factor equal to the number of separate paths observed
 - B. Transmission rates must be decreased by a factor equal to the number of separate paths observed
 - C. No significant changes will occur if the signals are transmitting using FM
 - D. Error rates are likely to increase

4. (T4B10) Which of the following is an appropriate receive filter bandwidth to select in order to minimize noise and interference for CW reception?
 - A. 500 Hz
 - B. 1000 Hz
 - C. 2400 Hz
 - D. 5000 Hz

5. (T5D02) What formula is used to calculate voltage in a circuit?
 - A. Voltage (E) equals current (I) multiplied by resistance (R)
 - B. Voltage (E) equals current (I) divided by resistance (R)
 - C. Voltage (E) equals current (I) added to resistance (R)
 - D. Voltage (E) equals current (I) minus resistance (R)

6. (T6B03) Which of these components can be used as an electronic switch or amplifier?
 - A. Oscillator
 - B. Potentiometer
 - C. Transistor
 - D. Voltmeter

7. (T7B04) Which of the following is a way to reduce or eliminate interference by an amateur transmitter to a nearby telephone?
 - A. Put a filter on the amateur transmitter
 - B. Reduce the microphone gain
 - C. Reduce the SWR on the transmitter transmission line
 - D. Put a RF filter on the telephone

8. (T8B05) What is a satellite beacon?
 - A. The primary transmit antenna on the satellite
 - B. An indicator light that shows where to point your antenna
 - C. A reflective surface on the satellite
 - D. A transmission from a space station that contains information about a satellite

9. (T9B11) Which of the following types of feed line has the lowest loss at VHF and UHF?
 - A. 50-ohm flexible coax
 - B. Multi-conductor unbalanced cable
 - C. Air-insulated hard line
 - D. 75-ohm flexible coax

10. (T0A09) What kind of hazard is presented by a conventional 12-volt storage battery?
 - A. It emits ozone which can be harmful to the atmosphere
 - B. Shock hazard due to high voltage
 - C. Explosive gas can collect if not properly vented
 - D. All of these choices are correct

(For answers to test questions see bottom of page [11](#))

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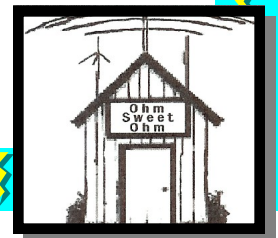
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Answers to questions on page [10](#): 1-C, 2-C, 3-D, 4-A, 5-A, 6-C, 7-D, 8-D, 9-C, 10-C