

THE OHM TOWN NEWS

October 2011

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PRESIDENT'S MESSAGE

September has been a busy month with many events that our club participates in. There was the 206 mile LOTOJA Logan to Jackson bicycle race with over 1500 cyclists, Top of Utah marathon from Hardware Ranch to Logan with over 2000 runners, and the BEAR 100 which is a 100 mile endurance run through the mountains between Logan and Fish Haven ID. Each of these events gives the radio operator a different challenge and perspective in using their equipment and radio skills.

Hams get to practice their net discipline and help the event all at the same time. They also get to ensure their equipment works. We have a chance to review what other ham radio operators have for radio communications equipment. We can discuss the capabilities and success of the equipment and get ideas on the different types of equipment. They also get to make new friends and meet other resources in the community.

A big thanks to those who have volunteered their time to support the events.

In another aspect of our club, we have received some awards from the Rocky Mountain Division conference that was held in Taos, New Mexico this year. Our very own club member Shirley Larson AD7HL was nominated and received the 2011 Rocky Mountain Division Ham of the Year Award.

Congratulations and thank you Shirley for all that you do. Also there was the QSL card, Club website, and Club newsletter competitions at the conference. Entries were made to all three of the competitions. Well, it was almost a clean sweep. Our club was awarded first place for the Club website and Club newsletter. It takes a lot of work to maintain our club website and to publish the club's newsletters. Thanks goes out to Jacob Anawalt KD7YKO, Kevin Reeve N7RXE, Ted McAuthur AC7II, Bob Wood WA7MXZ, and Tyler Griffiths N7UWX for their expertise and efforts in maintaining the web site. For the Newsletter, Dale Cox KB7UPW for the excellent work in publishing the newsletter and Jared Luther K7LRX for putting together the ham profile.



73, Cordell KE7IK





Shirley Larson - Ham of the Year

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UPCOMING ACTIVITIES

License test session - 6 October, 7-9 PM (see below for more info)

Swaptoberfest - Club Meeting - 8 October, 8:00 AM Located at the Cache County Fairgrounds Pavilion, 450 South 500 West in Logan, UT

Jamboree on the Air - 15 October At the Cache County Sheriff's Complex 3rd Floor Room 3, 1225 West 200 North, Logan, UT

RACES VHF Net - 20 October, 8:00 PM

Club Meeting - 12 November, 10:00 AM

RACES HF Net - 19 November, 8:00 AM 3920 KHz

Club Meeting - Christmas Party - 7 December, 6 PM At the Coppermill Restaurant

RACES VHF Net - 15 December, 8:00 PM

BARC Club Meetings are normally on the 2nd Saturday of the month at 10:00 A.M. on the 3rd floor of the Cache County Sheriffs Complex on 200 North and 1225 West, Logan, Utah.

ARES Meetings are usually held on the Third Wednesday of each month at 7 P.M. at the Cache County Sheriffs Complex. Contact Tyler Griffiths for more information.

The next test session held in Logan will be on October 6th, 2011. It will be held from 7 to 9 PM at the ASTE building at Utah State University. It will be in room 108, the ASTE building is located at 1498 North 800 East in Logan, just North of the 1400 North 800 East intersection on the East side of 800 East. The cost to take the test is \$15.00 in exact change or check. You will need to bring your ID, and if you are planning on upgrading an existing license please bring an extra photocopy of your current license. Please <u>RSVP</u> for the upcoming test, for more information about paperwork and what to bring go to <u>www.barconline.org/licensing/local</u>.

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HAM PROFILE

Spence (KE7TAS) and Beryl (KE7TRF) Dattage

About three years ago, a sign up sheet went around the Dattage's church asking for volunteers to take the CERT class and for anyone interested in a ham radio class. They both signed up for the CERT class, but not the radio class. Spence's bishop asked him to take the radio class as well. Beryl tagged along for the fun of it and to support Spence in his endeavor. A few months later, when Spence was called to be the communications specialist for their ward, their casual interest began to grow into a passion. After being asked to take on more emergency communication responsibility at church, they decided to study more and get their general licenses. "We love it!" says Beryl. "Everyone is so very helpful in the club, and so many are so knowledgeable that sometimes I feel pretty dumb, but they just help me and I'm getting it, a bit at a time. As we continue to learn, more avenues for service open up and even more opportunities to help the club."

Their first chance to help with an event was the Little Red cycling event. They had no awning, just their handheld radio and it was freezing cold, but they said they actually had a great time. The next year at Little Red, they were more prepared with a base unit and access to the clubs awning and it was warmer. They assisted in the Canyon Road mud slide in 2009. They live close by, so Spence was the first on the scene and was glad to turn it over to Tyler Griffiths when he got there because they didn't have much experience at the time, but they learned a lot from that experience. They have been in BARC for three years and have participated in 3 Little Reds, 3 TOU marathons, and several local events. They participate in their LDS Stake net bimonthly and Spence has set up and conducts a Block Captain Net in their neighborhood twice a month. Finally this year, they felt confident enough to attempt LOTOJA. "I'm telling you it just gets better and better. Field Day this year was awesome!" says Beryl. They really enjoy the club meetings, and say they learn something new at every one.

Spence's dad retired from the military in 1965 and settled in Logan. Beryl went to school and graduated from Cardston High School in Alberta Canada. They met at USU, got married and have seven children. They have lived in Logan all of their married life. They truly love to be here in Cache Valley.

Jamboree On The Air 2011

The Bridgerland Amateur Radio Club is participating in the Jamboree On the Air (JOTA) this year. All Scouts and their leaders are invited. It is an annual event in which Scouts from all over the world can speak to each other by means of amateur radio contacts. The purpose is to meet each other, share their Scouting experiences, exchange ideas, learn from each other, and gain a mutual understanding, via the radio waves. It will be at the Cache County Sheriff's Complex on the 3rd floor, room 3, located at 1225 West 200 North, Logan, UT.

The BARC Radio Club will be offering to the Scouts an entry level class for the Technician Class License. The class will help you to learn the material you need to know to get your very first Amateur Radio License. Details on the location and times for the class will be available at the JOTA event.

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REPORT ON BARC REPEATERS

This summer the Repeater Committee has been busy with several projects. We were plagued with lots of problems from the last winter. Mt Logan had high de-sense problem, a problem with noise on the repeater during bad weather, the Antenna on the link repeater was bad. Red Spur was off the air, it seemed to be a low battery problem, this is a Solar Site. Promontory had a problem where it had something keying up the repeater continuously via the link input frequency. Our friends in Star Valley had a very high noise level on Black Mountain making their Repeater almost unusable.

Here is a list of the Trips and the repairs that have been completed this Summer.

Mt Logan - 3 trips. Replaced the feed line & Antenna to the 146.72 Repeater. Replaced the Antenna on the Link Repeater, added a tone Board to the Link Repeater. Retuned the 146.72 Duplexer to reduce the De-sense. Made adjustments to fix the Autopatch radio.

Red Spur - 2 Trips. 1st trip was to find out what was wrong, we found that the Solar Charge Controller had gotten wet and failed. The second trip the controller was replaced and the voltage controlled Relays were set, and we put the Repeater on a better antenna.

Promontory - 1 trip. This site was getting something on the link receiver that caused the 147.26 repeater to key up. We programmed in the PL tone on the Link receiver, this will help keep the interfering frequencies from getting in. This Required going to Mt Logan and adding a PL Board to the Link Repeater.

Black Mountain Wy - 2 Trips. We put up a temporary repeater for LOTOJA and then took it back down after the Race. The Site noise was very high causing us to work all day trying to come up with a way to make the repeater work. Finally we ended up putting the Antenna a few hundred feet down the hill to get some vertical separation. Come race day we found it worked Great.

I really want to thank everyone that has helped with the Repeaters. All help is appreciated, monitoring, reporting problems, ordering parts, manpower, and help with funding. I want to make a special thanks to our lead experts Bill Neville and Bob Wood for all their time and guidance keeping our repeater system up and running.

Ted McArthur AC7II

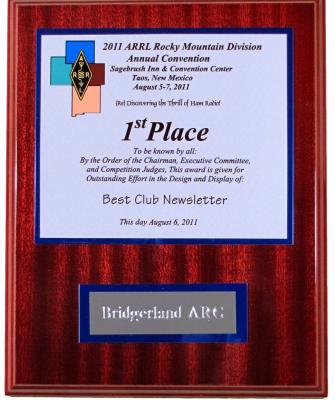


Some of the team that setup and maintains the Club Web site that won the award





Some of those that contribute too and publish The Ohm Town News, the club newsletter



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Technician License Class

There have been several inquiries recently for a technician license class. Brent Carruth is planning on teaching a class on Thursday evenings starting on October 27 and continuing on November 10th and 17th and December 1st and 8th. If all can be arranged there will be a test session on December 10th. The ARRL Ham Radio License Manual is a very valuable resource when preparing for the exam, Brent can order manuals from ARRL and get them to those interested for \$20 each. If you are interested in this class or know of someone that would be, please e-mail Brent and let him know, also if you have other questions about the class please contact him at ad7vf@arrl.net.

SwaptoberFest 2011—What's that?

SwaptoberFest is going to be help on October 8th starting at 8:00 AM. (Or at if you want to setup a table for items to swap or sell) That's right, if you want to sell some of your old "junk" or want to check out some great buys, come to the Cache County Fairgrounds Pavilion at 450 South 500 West (The best access would be thru the gate across from the aquatics center). Admission is free and the swap tables are free if you want to use one of them. There will be some drawings with some great prizes: Handheld dual band radio, DV-Dongle, ARRL gift certificates, MFJ item. Refreshment will also be available for purchase. An HF station will be setup with a control operator present, so anyone with or without a license can get on the air. Talk in repeater frequencies are: Mt. Logan 146.720– T103.5, Promontory 147.260–T103.5, and IRLP 3381. Also D-Star Repeaters: NU7TS-B 449.575, AC7O-B 447.975, and AC7O-C 145.150.

This is the activity that the BARC club is having for the month of October, so come have a great time and enjoy the company of fellow amateur radio operators, and find that bargain you've been searching for.

Club Christmas Party at the Coppermill restaurant

The BARC club Christmas Party is going to be at the Coppermill restaurant this year. I will be held on December 7, plan on arriving at about 6:00 PM, dinner will be served at 6:30. Cost is \$21 per person, the dinner menu is Prime Rib and Paprika Chicken Buffet. More information will be available shortly.

Club Elections in November for 2012 Club Officers

Have you always wanted to be on the Board of Directors or the club President? Now is your opportunity! The elections for the Club Officers for next year will be held in conjunction with the November club meeting. The positions that will be available are President, Vice President, Secretary, Treasurer and some of the members of the Board are elected each year. If you would like to run for one of these offices please contact one of the current officers or board members to get your name on the ballot.

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Take care of those batteries before winter sets in

By Kevin Reeve N7RXE

As winter approaches, the summer amateur radio events come to an end, and so does the use of some of your radio gear. Before you pack everything away for the winter, take some extra time and take care of those batteries you have.

Many of you probably have batteries, either the little 7 Amp Hour batteries, or perhaps a larger 12 Amp Hour or even 33 Amp Hour. These are great batteries for emergency communications, and running your radios during public service events, especially when you are stationed out on the middle of nowhere. They can still be great batteries for next years activities if you will just take care of them now.

Maintenance of your battery is pretty easy, just charge them up before you stick them away for the winter. Take the time to hook them up to the charger and get them charged up. Don't have a charger, well get one. A battery is no good if you can not charge it up. AGM batteries will only discharge between 1 - 3% per month just sitting, so give them a head start and charge them up to full capacity. Then store them away where they will stay cool, but not freeze. Keep them off the direct cement by placing them on wood, or even cardboard. Do not leave them more the 4 - 6 months without charging them again. Then in the Spring pull them out and hook them up and use them. Your batteries will be of no use to you if they do not get used. There are plenty of opportunities in this valley to get them out and use them. Even if it is a camping trip to the mountains.

One idea for keeping them charged over the winter is to buy a timer that can turn your charger on and off for just a few hours once a week, to keep the battery topped off.

A simple step now will keep you on the air and operational for emergencies and public service events in 2012.

Swaptoberfest club store items

The swaptoberfest is coming Saturday October 8th at the fair grounds. I am in the process of stocking up the club store with requested items. Here are some highlights.

Dual Band Arrow Jpole antennas. (This was a bulk order to save \$\$\$ so get them why they last.) Dual band mobile NMO mount Tram Antenna Mag mount bases Comet dual band mag mount with SMA connector Comet dual band mag mount with PL-259 connector Tri Crimp Anderson Power Pole Crimpers Anderson PowerPoles 12 volt car adapter to power pole connector – all in one unit. 12 and 10 gauge wire – Red black zip cord RG-213 50' coax cable with PL-259 connectors (2 of these) RG8X by the foot RG8X 100' with PL 259 connectors (1 of these) Coax kits for vehicles – NMO Plus all kinds of connectors and adapters. Including some new SMA female to PL-259.

Cash or Check only. Do not forget admission to this event is free.

See you there. Kevin



The ARRL Letter for September 8, 2011 Report Calls on NASA to Hire More Astronauts



Even as the space shuttle era has come to a close, a NASA-commissioned report says the space agency needs to hire more astronauts to maintain its presence on the International Space Station and prepare for the next generation of spaceflight. The report warns that "the Astronaut Corps appears to be sized below the minimum required" and that the current corps size "poses a risk to the US investment in human spaceflight capabilities." NASA commissioned the report from the National Research Council, part of the National Academy of Sciences, to examine the agency's astronaut and astronaut training needs in the post-shuttle era. NASA Spokesman Michael Curie said that the report "offers helpful advice about the appropriate size of our astronaut corps as we enter this exciting new era of space exploration and crew transport operations." Beginning in November 1983 with Owen Garriott, W5LFL, on board STS-9, Amateur Radio

has been an integral part of NASA missions in space. More than 100 NASA astronauts have received their Amateur Radio license. Read more here.

The ARRL Letter for September 15, 2011 *Public Service*: Missouri Hams Help Out When 911 Service Goes Down

It doesn't take a major disaster for Amateur Radio to step in and save the day. Around 9 PM on September 5,

a cable cut completely isolated the Johnson County 911 Center in Warrensburg, Missouri, impacting landline, Internet and cellular service. Johnson County -- home to Whiteman Air Force Base -- is located just east of the Kansas City metro area.

Johnson County's emergency plan called for the telephone company to transfer all 911 calls to the Henry County 911 facility in Clinton, Missouri; Henry County is the next county south of Johnson County. But an equipment problem at Henry County's center prevented the transfer from completing successfully. Calls were then routed to the Benton County 911 Center in Warsaw, Missouri; Benton County is the next county west of Henry County. This transfer was successful and calls started coming in to Warsaw. Unfortunately, Warsaw is more than



40 miles from Warrensburg, and the two centers were unable to establish communication using the county VHF radio facilities. It was then that radio amateurs were brought in to provide communications support. Read more <u>here</u>.

Heathkit's Amateur Radio Plans Taking Shape

Heathkit Educational Systems hopes to reenter the Amateur Radio market by the end of 2011. Back in August,

Heathkit <u>announced</u> its return to the kit business and actively solicited suggestions. The response from Amateur Radio operators convinced Heathkit to develop several Amateur Radio products.



"When we made the announcement on our web page about a month

ago, we had no intention of entering the Amateur Radio kit market," Ernie Wake, Heathkit's Director of Sales and Marketing, told the ARRL. "The response was really overwhelming, exciting and scary. The scary part is that the brand name has so much loyalty that we don't want to disappoint the people who have such fond memories."

Wake said that Heathkit is presently working on developing a few Amateur Radio kits. "Initially, the kit line will include a few 'accessories,' like kits for a Dual Watt Meter, Antenna Tuners and the Cantenna," he explained. "Once we are a little more 'settled,' I think we will develop a QRP receiver. We won't rush to market just to get there. We want to develop a line of kits in the tradition of Heathkit. I'm hoping to have one or two kits by the end-of-the-year."





The ARRL Rocky Mountain Division Update August/September 2011

===== 2011 Rocky Mountain Division Convention - Success =====

The 2011 ARRL Rocky Mountain Division Convention held last August in Taos, New Mexico was a great success. 705 hams from over a dozen states attended and enjoyed the numerous activities that were planned including a ballroom full of vendors and manufacturers, over 30 technical and non-technical forums arranged in tracks (DX/Contesting, ARES, QRP, and D-STAR), buying and selling gear indoors and at the tailgate, special event station W1AW/5 which made over 600 QSOs, VE exams, a bunch of great ham radio competitions, meals, prizes, silent auctions, numerous family/spouse activities, nightly star parties, guest speakers (Riley Hollingsworth K4ZDH, Dan Henderson N1ND, Chip Margelli K7JA, and Rick Roderick K5UR), and more. The goals were a weekend packed with ham radio fun and ample opportunity to meet plenty of new people and catch up with old friends.

A huge thank you goes out to everybody on the organizing committee who poured their hearts and souls into this event, all volunteers and organizations (especially Rocky Mountain Ham Radio) who assisted in any fashion, and the event's generous donors.

The Utah section is due to host the Convention in 2012 (details forthcoming) and Colorado is on deck for 2013.

===== Announcement: Rocky Mountain Division Net =====

The monthly Rocky Mountain Division net takes place next month and we're doing things a little differently. To eliminate unpredictable noise and propagation that's affected the net on HF over the last number of months, we are going to conduct next month's net via IRLP.

Now anyone with a VHF/UHF radio within range of an IRLP repeater can check in and hear the latest Division news. Here are the details:

DATE: Wednesday, October 12 TIME: 7:30 PM Mountain

IRLP NODE: 9871 (link to this reflector from your local IRLP repeater)

Check out <u>http://www.irlp.net</u> (Node Info section) to find an IRLP-capable repeater in your area. Generally all you need to do to link into the reflector is enter "9871" with your DTMF keypad and wait for the voice prompt indicating that the link is open. To unlink, enter "73". However, to be safe, check with your local IRLP repeater's trustee to confirm beforehand. Their contact information is found when searching for IRLP repeaters in your area. If you've never used IRLP before (you'll be fascinated by it!) please experiment with linking/unlinking before the net.

General check-ins will be accepted, news and information will be passed, and everyone participating will be invited to ask their Division leadership questions, raise any concerns, or suggest ideas. We hope you'll join us.

===== Upcoming hamfests, tailgates & conventions =====

September 25 Boulder Amateur Radio Club BARCfest (Longmont, CO)

October 8 Swaptober Fest (Logan, UT)

October 29 Socorro Hamfest (Socorro, NM)

November 5 2011 Fall TechFest (Morrison, CO)

Links to websites belonging to the above events are found on the Rocky Mountain Division site: <u>www.RockyMountainDivision.org</u> If you're organizing a Hamfest, convention, or tailgate please consider having your event ARRL-sanctioned. Sanctioning details can be found at <u>http://www.arrl.org/hamfest-convention-application</u>

===== Final note... =====

Please touch base with your Section Manager if he can be of assistance to you:

Jeff Ryan K0RM (Colorado): <u>http://www.arrl.org/Groups/view/colorado</u> Don Wood W5FHA (New Mexico): <u>http://www.arrl.org/Groups/view/new-mexico</u>

Mel Parkes NM7P (Utah): <u>http://www.arrl.org/Groups/view/utah</u>

Garth Crowe N7XKT (Wyoming): http://www.arrl.org/Groups/view/wyoming

Vice Director Dwayne Allen and I continue to welcome your concerns, questions or ideas regarding ARRL policies. See you on the airwaves!

73,

Brian Mileshosky N5ZGT, Rocky Mountain Division Director <u>n5zgt@arrl.org</u> Dwayne Allen WY7FD, Rocky Mountain Division Vice-Director Division website: <u>www.RockyMountainDivision.org</u>





The ARRL Letter for September 15, 2011 Hays Affinity Group Provides ARRL Members with **Equipment Protection, Club Liability Insurance Plans**



On May 1, 2011, the ARRL began a new partnership with Hays Affinity Group to provide its ARRL-sponsored Equipment Insurance and Club Liability Insurance plans. Hays -- who took over from Marsh Affinity Group Services -- serves as the program administrator to provide equipment insurance to ARRL members who choose to elect coverage. In addition, Hays will also provide club liability insurance to ARRL Affiliated Clubs for those clubs that wish to take advantage of that program. Hays has introduced new policies for both plans, underwritten by the Hanover Insurance Company. Read more here.

The ARRL Letter for September 29, 2011 On the Air: Scouts to Take to the Airwayes for the 54th Jamboree on the Air

Each year, more than 500,000 Scouts in more than 100 countries take to the airwaves on the third full weekend in October -- and this year will be no different. The Jamboree On The Air (JOTA) is a Scouting and Amateur Radio event sponsored by the World Scout Bureau of the World Organization of the Scout Movement. JOTA is an annual event where Boy Scouts, Girl Scouts and Girl Guides from all over the world speak to each other via Amateur Radio. Since 1958 -- when the first Jamboree on the Air was held -- millions of Scouts have met through this event. Many contacts made during JOTA have resulted in pen pals and links between Scout troops that have lasted many years. The radio stations are operated by radio amateurs, and many Scouts and leaders hold licenses and have their own stations. The majority of JOTA Scouts participate through stations operated by local radio clubs and individual hams. Read more here.

HB9DRV Sells Rights to Ham Radio Deluxe

Simon Brown, HB9DRV, has sold the rights to his popular Ham Radio Deluxe software package to a group consisting of Mike Carper, WA9PIE, Randy Gawtry, K0CBH and Rick Ruhl, W4PC. All three principals have more than 25 years of experience with radio data communications. Rick Ruhl is the president of W4PC Software, Inc. whose products include the PakRatt, PKTerm and Radio Operations represents radio communication; in JOTI, the Center software suites. Randy Gawtry is the president of Timewave letter I, a mouse represents the Internet. This Technology Inc whose products include the PK and DSP families of idea is to graphically represent a world which data controllers and other commercial data products. Mike Carper is an experienced Fortune 500 technology executive, educator and featured speaker in the areas of wireless technologies and IT Service Management. Read more here.



For 2011, the WOSM organized a logo contest to choose the official logo. More than 100 logos were submitted. The winner of the contest is: Felipe Trejo Malpica from the Octavio group in Jalisco, Mexico. "The reef knot unites the world so it doesn't rip apart, especially in these times of crisis," Felipe said. "It also symbolizes the Scout Brotherhood throughout the world. In the typography of JOTA, the letter O uses modern means of communication to send a message of peace, unity, and of support in the face of the disasters that surround JS."

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ARRL Briefs White House Staff on Amateur Radio's Capabilities During Emergencies

On September 12, at the invitation of <u>White House Cybersecurity Coordinator</u> <u>Howard A. Schmidt, W7HAS</u>, the ARRL briefed several members of the National Security Staff on the capabilities of the Amateur Radio Service to communicate in emergencies. "The White House is looking for ways that the great work of Amateur Radio operators can continue to support emergencies in the future with particular attention to increased use and dependency on Internetbased technologies," Schmidt said. The ARRL presentation, conducted by Emergency Preparedness Manager Mike Corey, W5MPC -- along with President Kay Craigie, N3KN, and Chief Executive Officer David Sumner, K1ZZ -focused on Amateur Radio's current and evolving capabilities to provide Internet messaging connectivity.



White House Cybersecurity Coordinator Howard A. Schmidt, W7HAS (left) invited the ARRL to the White House to brief staff on the part that Amateur Radio plays in Emergencies. Standing with Schmidt outside the West Wing are (left to right) ARRL President Kay Craigie, N3KN, ARRL Chief Executive Officer David Sumner, K1ZZ, and ARRL Emergency Preparedness Manager Mike Corey, W5MPC,

Amateur Radio in Space: Take the ARISSat-1 Survey



<u>AMSAT</u> is inviting radio amateurs to complete a 19-question survey regarding <u>ARISSat-1</u>. "Please take a few minutes to answer the <u>questions</u>," said Steven Bible, N7HPR. "The survey results will be posted to the <u>official ARISSat-1</u> website." ARISSat-1 was deployed from the International Space Station in August 2011 and is active on the following frequencies and modes:

145.950 MHz FM Downlink: FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages, as well as SSTV images. If you successfully receive the SSTV transmissions, you are invited to upload your picture to the <u>ARISS SSTV Gallery</u>.

• **435 MHz** - **145 MHz** Linear Transponder: The linear transponder will operate in Mode U/V (70 cm up, 2 meters down). It is a 16 kHz wide inverting passband from 435.742 to 435.758 MHz and the convention will be to transmit LSB on the 435 MHz uplink and receive

USB on the 145 MHz downlink between 145.922 and 145.938 MHz.

• **145.919 MHz/145.939 MHz CW Beacons:** The CW transmissions will be call sign ID RS01S, select telemetry and call signs of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry: The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q. When the CW2 beacon on 145.919 MHz is active, this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active, the backup of BPSK-400 format is being transmitted.

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Questions for Extra Class License

1. (E1A10) If a station in a message forwarding system inadvertently forwards a message that is in violation of FCC rules, who is primarily accountable for the rules violation?

A. The control operator of the packet bulletin board station

B. The control operator of the originating station

C. The control operators of all the stations in the system

D. The control operators of all the stations in the system not authenticating the source from which they accept communications

2. (E2A13) What type of satellite appears to stay in one position in the sky?

- A. HEO
- B. Geosynchronous
- C. Geomagnetic
- D. LEO

3. (E3B08) What type of propagation is probably occurring if radio signals travel along the terminator between daylight and darkness?

- A. Transequatorial
- B. Sporadic-E
- C. Long-path
- D. Gray-line

4. (E4C13) How does a narrow band roofing filter affect receiver performance?

A. It improves sensitivity by reducing front end noise

B. It improves intelligibility by using low Q circuitry to reduce ringing

C. It improves dynamic range by keeping strong signals near the receive frequency out of the IF stages

D. All of these choice are correct

5. (E5A14) What is the resonant frequency of a series RLC circuit if R is 22 ohms, L is 50 microhenrys and C is 40 picofarads?

- A. 44.72 MHz
- B. 22.36 MHz
- C. 3.56 MHz
- D. 1.78 MHz

6. (E6B02) What is the principal

- characteristic of a tunnel diode?
 - A. A high forward resistance
 - B. A very high PIV
 - C. A negative resistance region
 - D. A high forward current rating

7. (E7B15) What is the effect of intermodulation products in a linear power amplifier?

- A. Transmission of spurious signals
- B. Creation of parasitic oscillations
- C. Low efficiency
- D. All of the above

8. (E8D06) What is the advantage of using a peak-reading wattmeter to monitor the output of a SSB phone transmitter?

A. It is easier to determine the correct tuning of the output circuit

B. It gives a more accurate display of the PEP output when modulation is present C. It makes it easier to detect high SWR on the feed-line

D. It can determine if any "flat-topping" is present during modulation peaks

9. (E9D15) Which of these choices would provide the best RF ground for your station?
A. A 50-ohm resistor connected to ground
B. A connection to a metal water pipe
C. A connection to 3 or 4 interconnected ground rods driven into the Earth
D. A connection to 3 or 4 interconnected ground rods via a series RF choke

10. (E0A07) What is the "far-field" zone of an antenna?

A. The area of the ionosphere where radiated power is not refractedB. The area where radiated power dissipates over a specified time periodC. The area where radiated field strengths are obstructed by objects of reflectionD. The area where the shape of the antenna pattern is independent of distance

(For answers to test questions see page 14)



The Ohm

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Answers to questions on page 13: 1-B, 2-B, 3-D, 4-C, 5-C, 6-C, 7-A, 8-B, 9-C, 10-D

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