

Serving the Tri-County area since 1986

AARC Dues Are Due April 1

It's that time again! Time to pay up. The Club needs your money. Bills have to be paid and the club treasury has dropped some with the recent purchase of radio equipment. Insurance to protect us during special events and public exhibits draws on funds as do Field Day expenses and Newsletter publication. So help us out by paying your dues.

Dues are still only \$10 for a full membership and \$1 for additional licensed family members, \$15 for a sustaining membership and \$5 for an associate (unlicensed, non-voting) membership.

There will be some application forms at the meeting. A copy of the membership application can be found on the Club's website at:

http://www.qsl.net/w8lky/ newslett.html

If you can't make it to the meeting, you can send your check, made out to <u>Alliance Amateur</u> <u>Radio Club</u> to:

Mary Ann Royer 6255 Sandalwood Ave. N.E. Canton, OH 44721-3340

In The News

The FCC has released a Notice of Proposed Rule Making for Broadband over Power Line. It can be found on the FCC's website at: http://www.fcc.gov

The proposal doesn't sound good for anyone involved, either the operators of the system or those trying to operate radio equipment near a power line. While the permitted interference levels won't actually damage your radio, you may do that yourself in frustration. It's unlikely that you will be able to hear any but local stations. And if you complain about the problem, the operators of the system must try to avoid your frequencies and on top of that, they may receive interference from your radio transmissions.

The deadline for comments will be 45 days after the NPRM has been published in the Federal Register, which should be soon.

Hawaiian Hams may soon receive some relief from restrictive covenants (CC&Rs) in housing areas. Two bills currently in the state legislature would insure that licensed Amateurs will be able to install some kind of antenna.

There is another bill, HR 1478, now in the US Congress, that would apply PRB-1 to CC&Rs on a nationwide basis. PRB-1 currently only protects Hams from local government restrictions that would prevent them from installing antennas.

Peggy Sue, of Buddy Holly fame, recently got her ham ticket. Her callsign is KE5AKW. She went to school with Buddy Holly and later married the drummer in his band.

In other Rock-n-Roll news, Joe Walsh, WB6ACU, of The Eagles, may be heard on W1AW this weekend, March 6-7, operating the International DX Contest (ssb), along with Bob Heil, K9EID of Heil sound. A special

(Continued on last page)

Ye Olde Meeting Announcement

The next meeting of the Alliance ARC will be on Wednesday, March 3rd, in the cafeteria of the Alliance Community Hospital. Our meetings begin at 7:30 PM, and are an excellent opportunity for eyeball QSO's. Directions can be found on the K8LTG Repeater (145.370) See you there!

Officers

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Editor

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Editorial

First of all, please note the change in my e-mail address. My Raex account, which I've had since 1996, will be discontinued soon. The company was bought out, first by an IP called Voyager, and then by a phone company called Core Comm. Core Comm raised the rates and also imposed restrictions on service. My new address is ke8ve@alliancelink. com.

Last month, I commented on the new license proposal. I have a few more comments on that subject.

My biggest concern over the reduced requirements for obtaining a license is that it will lead to a lack of respect for Amateur Radio in general. Already, many people have lost respect for the ARRL because they are sponsoring the proposal. Some say they are dropping their membership. We have no other lobbying organization. As individuals, we have very little influence on the FCC or on Congress. We need the ARRL to remain strong.

When people get something for nothing, or for very little, they don't treat it with the same respect as that which they had to struggle for. The CB band started off well enough, but it quickly went on a downward spiral into a cesspool, especially after the requirement for even a purchased license was dropped.

More and more countries are dropping the code requirement. The US doesn't have to follow their lead. We can lead the fight to preserve Ham Radio. We already have a no-code entry level license. And with only a 5 word per minute requirement for the higher classes, they are almost nocode already. Don't cheapen them further. Draw the line here. \Box

Meetings

The Alliance Amateur Radio Club meets on the First Wednesday of every month, in the cafeteria of the Alliance Community Hospital. Talk-in is on 145.37 ®. Meetings begin at 7:30 PM. Visitors are always welcome.

Nets

Thursday is our "net night," with the following nets on tap:

Ten meters

CW @ 8PM on 28.400 MHz SSB @ 8:30PM on 28.400 MHz

2 meters

9 PM on 145.37 MHz

Internet

If you'd like to check us out on the web, our E-mail address is:

w8lky@qsl.net Our club home page is: Http://www.qsl.net/w8lky

Newsletter Information

The Zero Beat is a publication of the Alliance Amateur Radio Club, P.O. Box 3344, Alliance, OH 44601

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You can submit material to the Zero Beat either electronically, to ke8ve@raex.com, in person, or via snail mail. I can read most word processor formats, but prefer your files to be in straight text, or Microsoft Word format.

February Minutes

ALLIANCE AMATEUR RADIO CLUB

February 4, 2004

The regular meeting of the Alliance Amateur Radio Club was held at the Alliance Community Hospital on February 4, 2004, at 7:30 P. M., with Robert Steele K8RLS, president, presiding. Secretary David Glass W8UKQ kept the minutes. There were 19 members present.

The Pledge of Allegiance was given, and introductions were made.

The minutes of the regular meeting for January were published in the newsletter. The total of the treasury balance was reported for the month. The report was approved upon motion by Howard KC8YIF, seconded by Jim K8LTG.

Mary Ann KB8IVS reported the treasury balances. The report was approved upon motion by George K3GP, seconded by Howard KC8YIF. Dues will be due April 1.

.Old Business: The Tusco Hamfest was discussed.

Attention was called to a story in The Repository about amateur radio. Several hams were profiled. Emergency communications were part of the story. There was no report about a power supply.

New business: The Lake County Hamfest in Madison will be March 28. Skywarn program will be March 24.

Larry KE8VE was congratulated on the great job on the newsletter.

Bob K8RLS read an e-mail from Jim Weaver K8JE, ARRL District Director, regarding the proposed licensing restructuring plan.

For the program, Don K8OMO, club emergency services coordinator, read and discussed a pamphlet regarding Family Disaster Preparedness. Each family should have a disaster plan. They should decide on places to meet in an emergency or evacuation. However, each ham should take care of the safety of his own family first before getting involved in the emergency communications.

The meeting adjourned at 8:30 P. M. upon motion by Frank WA8WHP, seconded by Smitty KC8TJQ.

Respectfully submitted, Dave Glass W8UKQ, Secretary □

The regular quarterly meeting of QCWA, Chapter 21, Canton, Ohio, was held Saturday, February 21, at the Old Country Buffet.

President Perry Ballinger W8AU had a video/PowerPoint presentation about his volunteer service on board the LST 325 last summer. He was the radio officer for three weeks on the LST's river cruise on the Mississippi and Ohio Rivers.

QCWA gold certificates were presented for amateur radio service:

Meritorious Award David W. Polen W8FRB 55 Years Anniversary Mae Rauvola W8EKL Century Club Phil Gizzi W8IIV Century Club Andy Hogue W8DIR. 50 Years Anniversary David Glass W8UKQ 50 Years Continuous Licensing David Glass W8UKQ

David Polen is our senior active chapter member. Eligibility for the Century Club is the total of the ham's age plus his years in QCWA. The anniversary awards are from the year of the first license.

Other certificates will be delivered soon to: Ralph Schoener W8TPS for 75 years, Myrhl Lemley W8MND for 70 years, Nelson Caley W8EAR for 55 years, and Keith Chambers W8VAN for 50 years.

Our next meeting will be May 22.-30-

73 Dave □

Zero Beat

THE WAYBACK MACHINE -- ISSUE #3

by Bill Continelli, W2XOY Reprinted with permission

Amateurs entered the summer of 1912 with a new Radio Act in place. Thanks to the Titanic disaster and the fear that commercial interests would try to monopolize the radio spectrum, the government stepped in and set up a licensing structure administered by the Secretary of Commerce. In the new law, amateurs (actually "private stations") were limited to a wavelength of 200 meters and a maximum power of 1 kW. Since the known usable spectrum at that time ran from about 300 to 3000 meters (1000 kHz to 100 kHz), it was widely believed that amateur radio would fade away, without expensive government enforcement.

At first, it appeared that the bureaucrats were correct. Before the Radio Act, there were an estimated 10,000 stations. Now, there were only 1200 licenses issued by the end of 1912. Amateurs were finding it difficult to get their spark stations going on 200 meters, and, when they did, they discovered their maximum range was 25-50 miles, instead of the 250-500 mile range they had on the longer wavelengths. Amateur radio was slowly heading for oblivion.

The big stumbling block to effective communications on 200 meters (or indeed any wavelength) was the spark transmitter and unamplified detector, both of which were extremely inefficient. On the transmitting end, no method, other than spark, was known. As for the receiver, there had been two developments in the vacuum tube area. J.A. Fleming had developed the diode detector in 1904. It cost a lot of money, provided no amplification, and used expensive batteries. It was not practical at the time, but it was covered by a patent. In 1906, Lee de Forest took Fleming's valve, added a third element, called a grid, and named the result the Audion. In the right circuit, the Audion could amplify by a factor of 5x. Still, because of the cost, battery requirement, and the ever popular patent fights of the time, it went unnoticed and unused until 1912, when a 22 year old amateur made an important discovery.

Edwin H. Armstrong was an experimenter and almost militant individualist. He had obtained an Audion for use in his station. Dissatisfied with the poor amplification, he tried different circuits. At one point, he "fed back" a portion of the output back to the input to be re-amplified. Instead of just a 5x amplification, the output was now 100x stronger than the input. He also discovered that if too much feedback was used, the tube began to oscillate. This regenerative circuit was the most important discovery in radio in years. One tube could amplify more than 100x, two tubes in series could give a gain of 2000+. In addition, an alternative to spark was now available. Instead of a raspy, broad, inefficient signal that took up hundreds of kHz, the Audion could be made to oscillate a stable, pure signal on one frequency. In fact, that's where the abbreviation "CW" comes from, (a Continuous Wave on one frequency rather than a broad, intermittent wave on many). Although it would take 10+

years to develop the stability in transmitters and receivers to fully utilize CW, King Spark was doomed.

Realizing the importance of his regenerative design in both transmitting and receiving, but lacking the money to develop it, in January 1913 Armstrong had the diagrams of his circuit notarized. This was only the first of many spectacular inventions Armstrong would come up with. Within 10 years, he would also develop the superheterodyne (now used in ALL receivers), and the superregenerative (the basis of all VHF and UHF receivers from the 20's to the 50's, and still used today in children's walkie-talkies). Even his first design, the regenerative circuit, is used by Ten-Tec and MFJ in their receiver kits. The crowning achievement in Armstrong's career came in the 30's, when he developed Frequency Modulation. With all due respect for those who flock to Loomis, Tesla, or Marconi as the father of radio, my vote goes to Armstrong, for without him, wireless would be stuck at the 1912 level. Armstrong had a tempestuous life, full of public and private battles, advancements, setbacks, and lawsuits, before his tragic death in 1954. The final legal battles didn't end until 1967. ("The Wayback Machine" will devote an entire column to Armstrong in a future edition.)

Meanwhile, back in 1913, word of the regenerative circuit spread quickly throughout the amateur world. Experimenters who added the Audion to their receivers discovered that distances of up to 350

Wayback

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miles were now possible on 200 meters. The Audion, already scarce and expensive, became even more so under the laws of supply and demand. The search for an Audion to the amateur was like the Quest for the Holy Grail. In fact, it was this search which led to the second pivotal event in amateur radio history.

Hiram Percy Maxim was a 44 year old engineer and inventor who had a 1kW amateur station in Hartford. Connecticut He wanted an Audion for his receiver and was unable to locate one. Finally, he heard of an amateur in Springfield, MA, who had one for sale. Hartford was (and still is) only 30 miles from Springfield, yet Maxim's station could not cover the distance. He found a station midway between the two cities that was willing to relay his purchase offer. Maxim thought about this and eventually realized that a national organization was needed to coordinate and standardize message relay procedures, as well as act as a national lobby for amateur radio interests. On April 6, 1914, Maxim proposed the formation of the American Radio Relay League. With the backing of the Radio Club of Hartford, who appropriated \$50, and some volunteers, Maxim developed an application form explaining the purpose of the ARRL and inviting membership. These were sent out to every known major station in the country.

Maxim, like Armstrong, was a prolific inventor. Unlike Armstrong, however, Maxim was also

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an expert in publicity and public relations. By July, national magazines such as Popular Mechanics were writing favorable reports about the ARRL. Maxim also traveled to Washington, DC, to explain the ARRL to the Department of Commerce and the Commissioner of Navigation.

The P.R. blitz paid off. By September, 1914, there were 237 relay stations appointed, and traffic routes were established from Maine to Minneapolis and Seattle to Idaho. Realizing that long distances on 200 meters were not possible at that time, even with a regenerative receiver, Maxim got the Department of Commerce to authorize special operations on 425 meters (706 kHz) for relay stations in remote areas.

Boosted by the publicity, the number of amateur stations, as well as the relay stations in the ARRL, continued to grow. By 1916, there were 6000 amateur licenses, (of which 1000 were ARRL relay stations) and 150,000 receivers in use. The emphasis in the ARRL was on the word RELAY; ARRL stations were expected to handle traffic on the 6 Main Trunk Lines (3 North/South and 3 East/West) that served more than 150 cities. And there was traffic. The general population (to whom phones were a luxury, long distance an exotic concept, and telegrams expensive) flocked to the idea of coast to coast free messages. As a P.R. exercise to test the system nationwide, on Washington's Birthday, 1916, a test message was sent to the Governors of every State, and President Woodrow Wilson in Washington, DC. The message was delivered to 34 States and the President within 60 minutes. By 1917, the system

was so refined that a message sent from New York to California took only 45 minutes. To deal with the increasing number of relay stations, the ARRL started a little magazine, which they called QST.

Other amateur activities in this period brought favorable publicity to the hobby. In March 1913, a severe windstorm had knocked out power, telegraph and telephone lines in the midwest. Battery powered amateur stations handled routine and emergency traffic until regular service was restored. This was the first documented emergency communications in amateur radio history. In 1915, amateur station 2MN determined that the powerful Telefunken station (see August 1996 issue of "Popular Communications" magazine) at Sayville, Long Island, was sending information concerning Allied and neutral shipping to submarines at sea Thanks to the work of this amateur, the government took over the station.

However, the war in Europe was getting closer. In April, 1917, based on continued violations of our neutrality and unrestricted submarine activity, Congress declared war against Germany. With the US now in World War I, a message went out from the Secretary of Commerce to all private stations. By order of the Chief Radio Inspector, all transmitting AND RE-CEIVING stations were to be closed AND DISASSEMBLED, and all antennas taken down. Complete radio silence was to remain until the war ended and the order was revoked. Amateurs by the thousands packed away their

(Continued on last page)

sasters could hupp nd police Management gency or disaster od sources of community risks.		-	×				sasters	Intentional	Biological	Chemical	Shooting	
identify what types of disasters could happen to you. Your local fire and police departments, Emergency Management Agency, public health agency or disaster relief organization are good sources of information in assessing community risks.	Questions to ask	What types of disasters are most likely to happen in your home or community?	What are your best sources of information to alert you to a disaster?	What are the community warning signals and what do they mean?	What plans are in place at your workplace, school and daycare?	Is there a need for special planning to accommodate an elderly or disabled person? What options are available	Some possible types of disasters	Accidental	Transportation	Chemical Release		
	Questio	 What most most hom 	•	•	•	•••		Natural	Hood	Blizzard	Heat Wave Earthquake	Hurricane
		sp.				Lebsre M	1					
ster Guide		Identify Hazards	Create Plan	Practice Plan	After the Disaster				1		t (ation)	borhood:
Family Disast eparedness 6		316	step:		,noex			Family Contact	local:	Non-locali	Meeting Place (location) Outside Houser	Outside Neighbo
				Disastersnatural and man- mude pose a potential threat to	families. How you prepare for and respond to these disasters directly affects you and your	family's chance for survival. This guide provides an overview on what you can do to protect your family from potential disasters.	Proparation = Survival	Emergency Numbers	ľ	1	Poison: 1-800-222-1222	

Schedule Monthly • Check smoke detectors	 Every Six Months Every Six Months Every Six Months Every even and practice disaster plan with family Even and practice disaster, clean smoke detectors Conduct a home hazard bunt Conduct a home hazard is anything that can create or intensity a disaster. Conduct and a same or intensity a disaster. Even even branch and is anything that can be even be a stanka Even even branch items for the even base of the eve	Clothing & Bedding One chunge of clothing and footwear per person blankets or sleeping bags blankets or sleeping bags preventation litems Personal hypiene items, plastic gabage bags and fecturt, bleach fecturt, bleach
Create Plan your plan is essential. Explain the dangers and the necessity for a plan. Use the same agencies in the "Identify Hazards" section to develop specific responses. Commit your plan to paper and educate each member of the family on how and when it is used.	 Points to remember Develop a response to each hazard identified in the "Identify Hazards" section Develop a list of emergency numbers, including someone out-of-town that you can contact following a disaster Teach children when and how to use these numbers Establish a meeting place immediately outside your home, as well as an out-of-area destination in case you cannot return home immediately Assemble a disaster supplies kit Assemble a disaster supplies kit Learn when and how to shut off water, gas and electricity (net a "home-hazard hunt") Learn when and how to shut off water, gas and electricity Install smoke detectors on each level of your home Know two ways out of every room Han how to care for the elderly or disabled Plan how to care for pets following a disaster 	Disaster Supplies Kit Nonperishable food Clothin prepare a three Canned meats, fruits, wegetables, soups, juices, milkt peanut butter, crackers, granola burs, frat Aid Kit One plant Water for three days Crackers, granola burs, traitnix Perion One gallon per person per day First Aid Kit Perion

March, 2004

After the Disaster	After	h your plan Follow plan for specific disaster Listen to news reports for information and instruction Assess condition of house, using a flashlight, not an open flame 	Smell for gas leaks, starting with water heater Shut off any damaged utilities	uelq tetsestb	And the marked of the second o	ing	LOW THEM ter supply kit identified trough a towel atter and areas
The key to surviving a disaster is to calmly, yet quickly execute the specific plan for the disaster you are experiencing.	 Remain calm and patient Put your disaster plan into action Provide assistance to those with special 	 needs, in accordance with your plan Check for injuries Listen to local news for information and instruction 	Quick Reference: for some potential Ohio hazards	Only fight small fires not in danger of blocking exit Use back of hand to check if doors are hot Crawl under smoke If trapped, close door, hang a sheet from the window Meet at your designated spot Never re-enter a burning building Call 911 from a neighbor's house	Take immediate shelter if a warning is issued Go to basement or internal hallway Avoid windows, glass or potential flying objects Leave windows closed Hang onto a heavy object with one hand Use the other hand to protect face and neck	During a WATCH, prepare to evacuate During a WARNING, evacuate immediately using primary or alternate evacuation route Fill bathtub with water in case of contamination Avoid flood waters and areas prone to flooding Shurt off LP tanks at source	Listen to news for instructions: FOLLOW THEM Prepare to evacuate and/or use disaster supply kit Stay away from victims until threat is identified Stay upwind, take shallow breaths through a towel Avoid possible contaminated food, water and areas
During Disaster	If disaster strikes		lick Reference:	Hre + Only I + Use b + Crawl + If trap + Meet i + Never	Take i Tornado • Take i • Go to • Avoid • Leave • Hang • Use th	Hood • During • During • Fill bat • Avoid • Shur o	Chemical + Listen Release/ + Prepar Biological + Stay as Event + Stay u + Avoid

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March 2004

Happy Birthday to: WC8F, KC8HUU, K8CBB, KB8IVS, KE8VE, KC8UMG, W8UKQ, K8OMO, N8LGE

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	1 COLUM. COUNTY TRAINING NET 8:00PM RSGB 80m Club Championship, Data SALEM AREA ARA VE, Salem OH	2 STARK COUNTY ARES NET 7PM 147.120 AGCW YL-CW Party ARS Spartan Sprint MBLAM ARES NET 9PM 147.255	3 AARC Meeting 7:30 CARROLL COUNTY NET 9:00PM 147.075	4 AARC NETS 8:00, 8:30, 9:00 QCWA Net 7:30	5 KC8HUU WC8F	6 ARRL Inter. DX Cont- est, SSB Makrothen RTTY Contest Open Ukraine RTTY Championship SILVERCREEK ARA VE, RITTMAN, OH	
7 DARC 10-Meter Digital Contest Open Ukraine RTTY Championship	8 Colum. County training NET 8:00PM	9 STARK COUNTY ARES NET 7PM 147.120 CUYAHOGA FALLS ARC VE, STOW, OH NORTHERN COLUMBIANA ARES NET 9PM 147.255	10 CARROLL COUNTY NET 9:00PM 147.075 RSGB 80m Club Champio- nship, CW	11 AARC NETS 8:00, 8:30, 9:00 Pesky Texan Armadillo Chase QCWA Net 7:30	12 K8CBB MASSILLON NET 8:00PM 147.18	13 AGCW QRP Contest KB8IVS Oklahoma QSO Party RSGB Commonwealth Contest SOC Marathon Sprint YL-ISSB QSO Party	
14 CUYAHOGA ARS VE, INDEPENDENCE, OH North American Sprint, RTTY NSARA Contest Oklahoma QSO Party UBA Spring Contest, CW Wisconsin QSO Party	15 colum. county training net 8:00pm	16 STARK COUNTY ARES NET 7PM 147.120 NORTHERN COLUMBIANA ARES NET 9PM 147.255	17 CARROLL COUNTY NET 9:00PM 147.075	18 AARC NETS 8:00, 8:30, 9:00 MAHONING VALLEY ARA VE, YOUNGSTO- WN, OH QCWA Net 7:30	19 MASSILLON NET 8:00PM 147.18	20 10-10 Int. Mobile Contest BARTG Spring RTTY Contest CLARA and Family HF <u>Contest</u> <u>KE8VE</u> Russian DX Contest Virginia QSO Party	
21 9K 15-Meter Contest Spring QRP Homebre- wer Sprint Toledo Mobile Radio Association Hamfest, Maumee, OH UBA Spring Contest, 6m	22 COLUM. COUNTY TRAINING NET 8:00PM KC8UMG TORNADO AWARENESS WEEK	23 STARK COUNTY ARES NET 7PM 147.120 NORTHERN COLUMBIANA ARES NET 9PM 147.255	24 Sky Warn Training, Canton OH CARROLL COUNTY NET 9:00PM 147.075 Sky Warn Trng Net - 0945 checkin on 145.370	25 AARC NETS 8:00, 8:30, 9:00 QCWA Net 7:30 W8UKQ	26 MASSILLON NET 8:00PM 147.18	27 CQ WW WPX Conte- st, SSB Spring Break RTTY Sprint	
28 K80M0 Lake County ARA Hamfest, Madison, OH WARREN ARA VE, NEWTON FALLS, OH	29 Colum. County training NET 8:00PM	30 STARK COUNTY ARES NET 7PM 147.120 N8LGE NORTHERN COLUMBIANA ARES NET 9PM 147.255	31 CARROLL COUNTY NET 9:00PM 147.075	1 2 3 4	T F S 5 6 7 12 13 14 19 20 21	April T F S S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	

42.7% of all statistics are made up on the spot.

March 2004



Alliance Amateur Radio Club P.O. Box 3344 Alliance, OH 44601

In The News

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QSL card with their picture will be sent out.

Beacon satellite UO-11, aka UOSAT-2, turned 20 years old on March 1st. It's beacon can be heard on 145.825 FM using a handheld.

Six Hams are scheduled to ride aboard the space shuttle Atlantis when it returns to space, the first shuttle mission since Columbia was destroyed on February 1, 2003. The crew members will be: Mission Commander Eileen Collins, KD5EDS; Pilot James Kelly, KC5ZSW; Mission Specialist Charles Camarda, KC5ZSY; Mission Specialist Wendy Lawrence, KC5KII; Mission Specialist Soichi Noguchi, KD5TVP; Mission Specialist Stephen Robinson, and Mission Specialist Andy Thomas, KD5CHF/VK5MIR. The shuttle may not be launched until sometime in 2005.

More details on all of these topics and more can be found on the ARRL's website. The ARRL Newsletter was the source of this material, but this is only a synopsis.

Wayback

(Continued from page 5)

stations and marched off to war. The 200 meter band was silent. In September 1917, with no radio activity permitted and 80% of the amateurs at war, QST ceased publication.

Would amateur radio survive the war? Join us next time as "The Wayback Machine" waits for Johnny ham to come marching home again.

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