

THE YAVAPAI SIGNAL

**THE YAVAPAI AMATEUR RADIO CLUB
PRESCOTT, ARIZONA DM-34
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WELCOME TO THE YAVAPAI AMATEUR RADIO CLUB

The Yavapai Amateur Radio Club (YARC) is an ARRL affiliated club. The club participates in many activities in the tri-city area including providing communications for local

events, emergency communications, volunteer exams, and promotion of the hobby throughout the community. Membership in the YARC is open to any interested amateur or non-amateur alike. The YARC meets at 7:00 PM local time on the 3rd Thursday of every month at the Granite Mountain Middle School, 1800 Williamson Valley Rd. in Prescott. It is about 1/2 mile north of Iron Springs Rd and all amateurs and non-amateurs as well are invited. Programs of interest are included as part of the meeting. The weekly NET is held every Wednesday at 7:00 PM local time on the 146.880- repeater. All amateurs are invited to participate and visitors are always welcome. The Yavapai County ARES/RACES NET is held on Monday nights approximately at 6:45PM local time on the 147.220+ repeater on Mingus Mtn.



Club Repeater

The local 146.880- MHz repeater is the official adopted repeater for the YARC. It is located on the hill above Willow Creek Rd and requires a PL of 100.0 Hz. If you hear a 1400 Hz pulsing tone, the repeater is on backup battery power and usage should be limited to necessary communications. The 147.040+ (100.0 PL) repeater is back up and running in Prescott Heights. Many thanks to Bill Kafka, W2YAV for the upkeep and use of the repeaters.



SHARING SPECTRUM WITH OTHER SERVICES A HAM RADIO REALITY

NEWINGTON, CT, Oct 31, 2001—Amateur Radio operators can get mighty territorial when they perceive that some other radio service is intruding upon "their" turf. What many hams often don't understand, however, is that Amateur Radio is a secondary service in the US on several popular bands or subbands. As such, it's subject to interference from primary radio service occupants and, by law, must avoid interfering with them. And, of course, ham bands are not all the same everywhere in the world.

Sharing Space at UHF and VHF

While some exclusive worldwide amateur band allocations do exist, hams share most of their spectrum—especially the UHF and microwave allocations—with other users, typically the US Government and Fixed and Mobile services. The popular 70-cm band, 420-450 MHz, is a good case in point, says ARRL Field and Regulatory Correspondent Brennan Price, N4QX.

"Amateur use of the 70-cm band is secondary to government radiolocation services in the US, so hams must tolerate interference from the primary service and may not QRM it," Price explained. No operation in the 420-430 MHz band is permitted in some parts of the US (in the vicinity of the Great Lakes), while 50-W output power limits apply to operations centered near certain US military installations. FCC Part 97 Amateur Service rules spell out the particulars in §97.303(f) and §97.313(f) and also are available in the ARRL FCC Rule Book.

Price notes, however, that military use of the band is not confined to these areas, and the band is utilized aboard aircraft. "We occasionally receive inquiries from amateurs who complain of 70-cm disruptions when military planes fly overhead," said Price, who also serves as the ARRL Monitoring System coordinator. "We have every reason to

YARC OFFICERS for 2001

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YARC BOARD OF DIRECTORS

Includes Club Officers

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Lee Cunningham-KC7GBK kc7ebk@arrl.net

Bob Kane-K7KOL arkane57@yahoo.com
Frank Homeff-WA6JBV

NEWSLETTER EDITOR - John Wilson-KM6BF

believe that the current spate of widely heard disruptions is due to high-altitude airborne operations by the band's legal, primary occupant—the US Government."

The 420-430 MHz segment is allocated on a primary basis worldwide to the Fixed and Mobile (except Aeronautical Mobile) services.

The 222-225 MHz band is exclusively amateur in the US, but there are no 1.25-meter allocations outside the US—a main reason that gear for this band is scarce. Hams in the US also have secondary access to the 219-220 MHz band for fixed digital message forwarding systems.

The most popular VHF band, 2 meters—144 to 148 MHz—is an exclusive amateur allocation in ITU Region 2, which includes North and South America. US hams who have taken along an H-T while vacationing in Europe or elsewhere in Region 1, however, know that the 2-meter band in that part of the world is 144-146 MHz. In Region 3, hams have exclusive access to 144-146 MHz and share 146-148 MHz on a co-primary basis with Fixed and Mobile Service stations.

On 6 meters—50 to 54 MHz—ham radio is exclusive in Regions 2 and 3, but the band is allocated exclusively for broadcasting in Region 1—although certain countries do allow limited 6-meter operation.

HF Sharing

The sharing news is much better on the higher HF bands. The 20, 17, 15, 12 and 10-meter bands are allocated to the Amateur Service on an exclusive basis worldwide with a few minor exceptions for 20. The Fixed Service is primary on 14.250-14.350 MHz in China, the Ivory Coast, Iran, many of the former republics of the Soviet Union and Afghanistan. On the rest of the bands, some sharing occurs, and things are a bit more complicated for amateurs.

On 30 meters—10.1 to 10.15 MHz—hams are secondary to non-US Fixed Service stations throughout. Amateurs must avoid harmful interference to these stations. In addition, operation in the US is limited to CW, RTTY and data at 200 W PEP output.

The 40-meter band is currently the focus of an effort supported by the International Amateur Radio Union and ARRL to obtain a 300-kHz worldwide exclusive allocation. As things now stand, however, most of the world does not have access to the 300 kHz-wide swath from 7.0 to 7.3 MHz that US hams enjoy. This issue is on the agenda for the 2003 World Radiocommunication Conference. One suggested remedy would shift the 40-meter amateur band downward by 100 kHz while moving some broadcasters up to create a 300-kHz worldwide band at 6.9 to 7.2 MHz.

The Broadcasting Service occupies the 7.1 to 7.3 MHz segment in Regions 1 and 3, and international broadcasters dominate the upper two-thirds of the band after sunset in many parts of the world. Thus, during nighttime hours in the US and especially during DX contests, it's common to hear amateur SSB operation in what's considered the CW band in the US, and US stations work SSB DX on 40 meters using split mode. Canadian and Caribbean amateurs also may transmit SSB in portions of the US CW band.

The 80 and 75-meter band—3.5 to 4.0 MHz—is exclusive to the Amateur Service in the US. Elsewhere in Region 2 hams have exclusive status from 3.500 to 3.750 MHz and share the rest of the band with foreign Fixed and Mobile services on a co-primary basis. Amateurs in Regions 1 and 3 share parts of the band with Fixed and Mobile, and there is no amateur operation allowed above 3.8 MHz in Region 1, which includes Europe. As a result, split-mode SSB DXing also is common on 75 meters.

The 1.8 to 1.9 MHz segment of 160 meters—sometimes called "Top Band"—is exclusive to US amateurs. Hams in the US are secondary on 1.9 to 2.0 MHz to the primary Radiolocation Service (government and non-government).

Outside the US in Region 2, ham radio is primary on 1.800 to 1.850 MHz and co-primary to Fixed, Mobile, Radiolocation and Radio navigation services on 1.850-2.000 MHz segment.





In Region 1, which includes Europe, the 1.800-1.810 MHz segment is given over to Radiolocation, while hams are exclusive at 1.810-1.850 MHz. There's no amateur operation above that in Region 1.

In Region 3, hams share 1.8 to 2.0 MHz on a co-primary basis with Fixed, Mobile (except Aeronautical Mobile) and Radionavigation Services, while the Radiolocation Service is secondary.

A table of US Amateur Radio allocations is available on the ARRL Web site. The "Considerate Operator's Frequency Guide" details band plans for Amateur Radio.



UPCOMING EVENTS OF INTEREST

-  November 24-25 CQ WW DX Contest CW
-  December 1-ARRL/ARCA/Superstition ARC Hamfest-Mesa Community College in Mesa.
-  December 7-9 ARRL 160-Meter Contest CW
-  December 15-16 ARRL 10-Meter Contest CW& SSB

More detailed information on Contests and Special Events can be found in most amateur publications such as QST, Worldradio, and others.



OCTOBER MEETING

October 18 Meeting Minutes Unavailable.

Respectfully Submitted,
John Wilson-KM6BF
Secretary



SPEAKERS WANTED! Want to make a presentation to the club? Got a favorite subject or experience you would like to share? If you do, we'd like to hear from you! Programs of interest are always needed for club meetings. Share your knowledge or experience with the rest of the club at our meetings. Contact Lee Cunningham, KC7CBK for more information.

THE NEWSLETTER!

If you have anything to share, please feel free to submit it for inclusion in the newsletter. We welcome your suggestions, comments, stories, personal experiences, or other items related to the hobby. Send e-mail to: km6bf@cablone.net



FROM THE MAILBOX

Sorry, no mail this month!



WE WANT YOU! Membership in the Yavapai Amateur Radio Club is \$20.00 for 1 year. Newsletters will be mailed only to those members not attending a meeting and current

on dues. Those in arrears 3 months will be dropped from the membership list. Dues can be mailed to the club PO Box or given to the club treasurer at any meeting.



FROM THE PAST, PAST-PRESIDENT



W7YRC de K7KOL

ru sk?

Negative, KOL. I'm just QSB while the members swap oxy tanks. Still on life support, but I think a strong bias is coming down the pike to QRO.

Roger, YRC. Welcome back.

The Yavapai Amateur Radio Club membership dug deep into its loyalty locker and found out that they really could keep a club going. They came up with a new slate of officers, continuing the legacy of (sk) KH6PP, Gene Piety; the club's 1991 spark.

WELL DONE members. Your care for the hobby and recognition of the good we do as a club overrode the inertia of just sitting back, letting "someone else do it". Maybe volunteerism isn't "SK", it just needs a jolt of reality to get it going. Something like a "kick start" to the butt of the teen-agers we used to have at home!

By the time you're reading this, club President Dale Leslie, N7XFD and I will have met with Dr. Steve Chadwick, WB8FAB and the Electrical Engineering students of Embry Riddle Aeronautical Institute. Dale and I are introducing the students to Ham Radio, and inviting

them to join our club, trading our knowledge and experience for their knowledge and enthusiasm.

Professor Steve Chadwick has joined the YARC, providing us with an easy liaison with the college. New blood in the club will give us new chores and challenges, while the old blood of the club can help the young men get their school ham station up and running. Talking via radio is nothing new to these students; they've had cell phones and pagers for a long time. Not having to pay monthly fees however might be an economic incentive for them to become active radio amateurs.

Welcome to the club Steve, your specialized expertise and association with ERAU will be valuable to us all.

COUGH YOUR WAY OUT OF A HEART ATTACK!!!

I ran across this article by Dr. Howard Kravetz of Prescott in the October 2001 *Prescott Paddler* newsletter. With the author's permission, I paraphrase and reprint it here for all of us.

While driving home alone from a meeting or the store you suddenly feel severe chest pain that begins to radiate out into your arm and up into your jaw.

You're about five miles from the nearest hospital, but don't know if you can make it that far. What to do? You remember some of CPR information, but that's always being done on someone else, not you doing it on you!!!

Without help, a person whose heart has stopped beating properly and starts feeling faint, has about 10 seconds left before losing consciousness.

TEN SECONDS: You can barely get the car stopped in 10 seconds!

Here's what you do ——— You start coughing, as hard as you can and as often as you can. Just like trying to get 40 years of tobacco smoke out of your lungs.

COUGH until it hurts

Take deep breaths between coughs— that alone will make many of us cough!!

If you're real lucky, you'll shock your heart into working well enough to get yourself to the nearest emergency room.

What happens when you breathe deep and cough?? The deep breaths get oxygen into your lungs, and the heavy coughing constricts the muscles in your chest to squeeze the heart rhythmically. Not as regular as Mother Nature intended, but good enough to let you make the next club meeting!!

73, **Bob Kane K7KOL**



FROM THE "I can't believe I heard it on an amateur radio" files:

Ham #1 "Well, they finally PL'ed the repeater!"

Ham #2 "So, it's a closed repeater now?"

Also overheard locally: "Why are there so many different PL tones?"

"Boy, if I just had a couple more watts I could get into a lot more repeaters!"

"The new radio I bought doesn't meet my non-technical knowledge!"

"Every time I turn on my radio, I wonder if it will work right!"

"I'll never buy another XYZ brand radio! They don't give you anything free!"

"Your signal is so good, I hear you in color!"

"You're going to have to talk louder, I can't decode what you're saying!"

"I like to scan all the repeaters but it doesn't stop when I want it to."



OTHER NEWS OF INTEREST

From Pen Brown, KJ7KL - Senior Communications Correspondent and News Analyst

FCC Clarifies Details of CORES Amateur Implementation

NEWINGTON, CT, Oct 23, 2001—The FCC's Wireless Telecommunications Bureau (WTB) has clarified several issues regarding Amateur Service implementation of the Commission Registration System—or CORES. After December 3, everyone doing business with the FCC—including amateur licensees—must obtain and use a 10-digit FCC Registration Number—or FRN—when filing. The new requirement further expands the number of FCC abbreviations, numbers and systems hams need to be aware of.

Many Amateur Service licensees now registered in the Universal Licensing System (ULS) already have been cross-registered in CORES and were issued an FRN by mail. The last cross-registration was done May 23.

The FCC has said it plans to do another cross-registration before December 3 and that once CORES becomes mandatory it will "auto-register" all amateurs who first go to register in ULS and issue them an FRN. Amateurs then may use either their FRN or their ULS-assigned Licensee ID Number in place of their Taxpayer Identification Number (TIN—typically an individual's Social Security Number) when filing applications with the FCC.

Starting December 3, new or upgraded license applicants not previously registered in ULS will automatically be registered in both CORES and ULS when they provide a TIN or SSN on a license application filed for processing by a Volunteer Examiner Coordinator.

CORES vs ULS

FCC licensing personnel emphasize that CORES and ULS are separate systems with different purposes. Starting December 3, however, a licensee's FRN will appear in both the ULS and CORES databases. Although both will contain an FRN, updating information in one will not update the other. The FCC-wide CORES is "entity registration" only and is designed to track fee payments to the Commission, such as vanity call sign fees. Individuals do not have to be licensed to obtain an FRN. The FCC says CORES will permit it to streamline fee collection and tracking.

For amateurs, CORES registration will replace ULS registration, but the ULS will remain the Amateur Service licensing database within WTB, and only ULS will associate an individual with a particular call sign. CORES doesn't recognize or track call signs. Amateur licensees will continue to be required to keep their ULS records current, especially in regard to maintaining a current FCC-license mailing address.

ATINs to Disappear

Going away December 3 will be the so-called Assigned Taxpayer Identification Number, or ATIN, which the FCC has been issuing to applicants ineligible to obtain a Social Security Number, such as foreign applicants and club station licensees. In its initial CORES announcement, the FCC said club station applicants should use the TIN/SSN of the club license trustee. The FCC has since told ARRL that clubs will be exempt from having to provide a TIN/SSN. Clubs may also choose to use a trustee's TIN/SSN or a tax-exempt club's IRS-assigned EIN.

CORES will provide an exemption category for clubs and those not holding a Social Security Number to register either as an amateur club or as a foreign entity respectively and to obtain an FRN to use when filing amateur applications via the ULS, an FCC spokesperson explained. Current ATINs will be converted to FRNs in CORES, and the FCC will not accept ATINs on applications starting December 3.

Once CORES/FRN becomes mandatory, those registering in ULS will be redirected to CORES registration. The FCC says the only time an amateur applicant will need to deal with CORES after that is to update registration information, such as when changing a CORES password, address or telephone number—although there does not appear to be a specific requirement to do so.

Additional Clarification Possible

CORES and ULS on-line registrants will be able to choose a password to access either system in the future. For those already cross-registered in CORES from ULS, their CORES and ULS passwords should be identical. The WTB says that starting December 3, "all passwords will be maintained in the CORES database." Amateurs

should contact the CORES help desk for password assistance. Call toll-free 877-480-3201.

The WTB is continuing to work out the details of how amateurs, CORES and ULS will co-exist, and it plans to start Amateur Service testing with CORES in early November. The results of that testing could lead to additional changes in how CORES will be implemented for the Amateur Service. The FCC has just issued another Public Notice [PDF, 91,247 bytes] that discusses the changeover to CORES/FRN in a general way and clarifies some aspects of how CORES and ULS will work together.

The FCC established CORES last year and has been in the process of implementing it. For more information on CORES/FRN, visit the FCC CORES Web site.



ARES/RACES NEWS



The Yavapai County ARES/RACES Nets are held Monday evenings at 1845 hours on the 147.220 VVARA Mingus Mountain repeater. The 147.260 Mt. Union Net is held immediately following the 147.220 Net at approximately 1900 hours. Future plans call for linking these two repeaters for emergency and Monday net use. Once we have the repeater link system in place both nets will be combined to begin at 1845 hrs.

NO REPORT THIS MONTH ☺

73, Lloyd Halgunseth WA6ZZJ
Yavapai County ARES/RACES DEC/Radio Officer
(520) 717-2706 wa6zzj@cableone.net



ARRL RENEWALS. If you join or renew your ARRL membership, the club gets to keep a small portion of the fee. Remember to include both the application and envelope when you submit it through the club. Thanks. David Passell-K6UWV-Treasurer.

ARRL VEC



Volunteer Examiner Testing



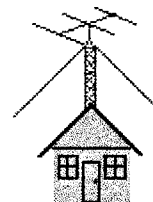
The tentative schedule for testing in 2002 will be (all Saturdays) 2/09, 5/11, 8-10, and 11/09. The new location will be at the Masonic Lodge on Willow Creek Rd (by K-Mart). Additional sessions may be held as

needed. All those attending for tests must have **ORIGINAL** license and a copy, Original CSCE's and 1 photo ID. (VE's-remember to bring and wear your VE - ID Badge!)

Special test sessions may be accommodated according to demands, as needed. The test fee for 2001 has been set at \$10.00. Further information can be obtained by contacting John Wilson-KM6BF at 636-1228 or Dave Rutledge-W9KRQ at 541-1225.

YOUR LOCAL PRESCOTT AREA VE's

- | | | | |
|-------|-----------------|-----------|---------------|
| AB7KE | Joan Tremper | AB7KF | Bob Nichols |
| AB7VH | Ruth Enabnit | K7KOL | Bob Kane |
| K7NGK | Don Broadston | KC7AGL | Don Muller |
| AB7SK | Ginger LeGendre | KK7JH | Billy Peters |
| KG7OL | David Miller | K17EB | Bill Thrift |
| KJ7KL | Pen Brown | N6LJK | Bob Hoffa |
| KM6BF | John Wilson | W2YAV | Bill Kafka |
| W7DC | Bob Harkey | W6CCD | Dick Hughes |
| W6HDP | Bill Jackson | W9KRQ | Dave Rutledge |
| | WB6ODR | Bob Smith | |



AREA REPEATERS

FREQ	PL	Location	Notes
52.560-	100.0	Mt. Union	CARS (-500Khz)
53.040-	C/S	Prescott Airport	-1 Mhz
145.350-	C/S	Wildflower Mtn.	DAWN
145.370	C/S	Towers Mtn.	MMRG
146.780-	91.5	Bill Williams Mtn.	BWARC
146.880-	100.0	Prescott	YARC
146.980-	100.0	Flagstaff-Elden	CARC
147.000+	100.0/162.2	Mingus Mtn.	MMRG
147.040+	100.0	Prescott Heights	W2YAV
147.140+	162.2	Flagstaff-Elden	ARA Link to Ord
147.220+	162.2	Mingus Mtn.	VVARA
147.260+	103.5	Mt. Union	YC EmergSvcs
223.960-	127.3	Chino Valley	NW7AZ
442.150+	100.0	Mingus Mtn.	Northlink
442.350+	100.0	Glassford Hill	N7KPU
448.475-	100.0	Flagstaff-Elden	ARA
448.500-	100.0	Prescott	KB6TWC
448.875-	100.0	Flagstaff-Elden	Northlink
449.175-	100.0	Towers Mtn	Northlink
		PACKET	
145.690		Davis-K7HS-7	DX Packet Node
145.010		Elden-W7MOT-8	Packet Node
145.010		Union-KB7FRV-1	Packet Node
145.710		Union-KB7FRV-2	Packet Node
145.010		PRCBBS-	Packet BBS
145.710		KB7FRV	

ADDITIONS, DELETIONS AND CORRECTIONS APPRECIATED



WEEKLY INFORMATION NET - WEDNESDAY NIGHTS @ 7:00 PM
146.880- (100.0 PL) IF YOU DON'T HAVE PL, TRANSMIT ON
146.880 SIMPLEX WHEN THE REPEATER DROPS OUT. ALL
AMATEURS WELCOME.

MONTHLY MEETING - 3rd THURSDAY @ GRANITE MTN MIDDLE
SCHOOL 7:00PM (N 34° 34' 22.6" W 112° 29' 45.1")

NEXT MEETING THURS. DECEMBER 20, 2001 @ 7:00pm



Wednesday Morning Breakfast-Iron Horse Café, S. Hwy
89 in Chino Valley (N 34° 43' 56.5" W 112° 27' 15.4"). 7:00AM.
Informal-All are invited.

Thursday Morning Breakfast-Michael's Restaurant in the Safeway
Shopping Center, Hwy 69 Prescott Valley. 7:00am. (N 34° 35' 13.3" W
112° 19' 44.6")All are invited.

Location data provided by Fred Zimmermann-N7PJN, per WSG84 Datum

SOME CARTOONS COURTESY OF WORLD RADIO™ MAGAZINE

YAVAPAI AMATEUR RADIO CLUB
PO BOX 11994
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Visit us on the web at: <http://www.w7yrc.org>

Many thanks to Bob Smith-WB6ODR, our Webmaster!

