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The Monthly Newsletter of the Monongalia
Wireless Association
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**Next MWA Meeting
Tuesday, Feb. 17
WVU Engineering Bldg., Rm G 084**

President Bill Says . . .

You lucky dog, you have just received a scholarship to the Massachusetts Institute of Technology. You may take any of over 500 classes online at no charge. for more information, check here <http://ocw.mit.edu/index.html> Online courses are offered in 33 departments from Anthropology to Electrical Engineering, to Writing. You get all the knowledge without the degree.

Speaking of Online Classes . . .

ARRL is enrolling persons for two new sessions of their Emergency Communications Course and their Antenna Modeling Course. Enrollment begins February 9. These are not freebies, and you can get more information at <http://www.arrl.org/cce/> Talk to Al, W3GEG, about the Emergency Communication Course since he has completed it.

Three persons took VE exams at the January session. Brian Carney, KC8YSE passed the General Exam. James Sickles, KA8VKF, passed the Technician Exam. Each of them receive a free year's membership in MWA. Congratulations to both of them.

New Morse Code Character

Just when you thought you had all of the Morse characters down pat, they come along with a new one. The 2003 World Radiocommunication Conference (WRC-03) drafted a new recommendation that specifies the international Morse code character set and transmission procedures. It also includes a new Morse code character to cover the "@" symbol used in e-mail addresses. The new character is "di-dah-dah-di-dah-dit", sent as "AC" with no spacing between the two letters.

Submitting information for Solid Copy

Please send any ham-related information that you would like to have considered for Solid Copy to Jack, wf8x@arrl.net Members may submit For Sale, or Wanted notes for ham-related items in the newsletter.

Results of the January MWA VE Exams

Restructuring the Amateur Service

The ARRL has filed a Petition for Rule Making asking the FCC to amend its Part 97 rules to complete the Amateur Service restructuring the Commission left unfinished in 1999. The League wants the FCC to create a new entry-level license, reduce the number of actual license classes to three and drop the Morse code testing requirement for all classes except for Amateur Extra (see "ARRL to Propose New Entry-Level License, Code-Free HF Access" <http://www.arrl.org/news/stories/2004/01/19/1/>)
– ARRL Newsletter

Youngest Extra Class?

Mattie, AD7BL, age 7 years, passed her Extra Class exam recently. I wonder, however – Can she explain to me why, and how, a Smith Chart can graph impedance along a transmission line? I get confused. Maybe its simpler than I always thought it was. See more about this ham whiz kid at <http://www.qrz.com/detail/AD7BL> .
– Jack, WF8X

Wildlife Tracking Projects

Since 1998, ham radio and VHF monitoring volunteers have helped scientists track the movements of endangered and threatened species. ARRL Amateur Radio Direction Finding (ARDF) Coordinator Joe Moell, K0OV, says that hams and monitoring enthusiasts could make a valuable contribution by participating. "The biggest volunteer monitoring project to date is now under way," Moell said this week. He reports that Nick Myatt of the Arkansas Cooperative Fish and Wildlife Research unit has radio-tagged 360 American woodcock in Minnesota, Wisconsin, and Michigan. "The woodcock migration has begun, and he is seeking reports of tags heard so he can attempt to

do pinpoint tracking from a fixed-wing aircraft," Moell said.

Possible stopover and destination states for these birds range from southern Minnesota and Wisconsin to Louisiana and eastern Texas. Moell says that Dave Sherman, a biologist with the Ohio Division of Wildlife, also has requested monitoring assistance in tracking two radio-tagged sandhill cranes that are now part of a larger flock migrating from Ohio. Additional information, including frequencies, is available on the Homing In Web site www.homingin.com

Sharing the Bands – a Ham Reality

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.

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. 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.

Two meters--144 to 148 MHz--is an exclusive allocation in ITU Region 2, which includes North and South America. Six meters--50 to 54 MHz--is an exclusive ham allocation in ITU Regions 2 and 3 but the band is allocated exclusively for broadcasting in Region 1.

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 the high end of 20. On other HF bands, some sharing occurs. 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.

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. 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. In the rest of the world, the upper two-thirds of 40 is dominated by broadcasters. This issue is on the agenda for the 2003 World Radiocommunication Conference. One suggested remedy would shift the allocation downward to create a 300-kHz worldwide band at 6.9 to 7.2 MHz.

The 80/75-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.

The 1.8 to 1.9 MHz segment of 160 meters 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).

A table of US Amateur Radio allocations is available on the ARRL Web site http://www.arrl.org/FandES/field/regulations/US_bands.pdf. The "Considerate Operator's Frequency Guide" details band plans for Amateur Radio <http://www.arrl.org/FandES/field/regulations/conop.html>

– ARRL Newsletter

Test Your Wits



Which equipment uses one or more of the above devices? (You may select more than one answer).

- a) Hewlett Packard 1 Gb Pentium 4
- b) SONY HDTV
- c) Collins KWM2
- d) Maytag model B30 clothes dryer

– CU on the air !