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# THE REGULATORY ROUNDUP

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## Accommodated Examinations

The rules for the conduct of Amateur Radio examinations are laid out in the Innovation, Science and Economic Development Canada (ISED) policy document “RIC-1 – Guide for Examiners Accredited to Conduct Examinations for Amateur Radio Operator Certificates”.

All Accredited Examiners (AEs) are required to follow these procedures. In most cases, the exams follow a standard pattern, and AEs do not have much room to vary.

Some people require a modified form of exam because of a disability. There is some latitude for AEs to “provide accommodated testing when a candidate identifies as having a disability that hinders their ability to take an exam”, but AEs “may not exempt a candidate from the requirement for an examination”.

RIC-1 allows AEs to use their discretion to make some kinds of accommodations. They list two: “Exams or parts of the exam may be administered orally (and) exams may be divided into segments that can then be completed at the candidate’s own pace.” I am an AE and I have conducted a small number of exams where the candidates required me to read the entire exam aloud. I recorded the candidate’s chosen answers on the answer sheet. It took a little extra time, but it worked out. They passed, and I upheld the integrity of the exam.

There is no provision for AEs to allow “open book” testing for those persons claiming a disability. In fact, RIC-1 clearly states that “Examinations are closed book”. Examinations for the Basic and Advanced qualifications “must be based on the question banks for either Basic or Advanced qualifications located on the Amateur Radio exam generator webpage”. These are only in English and French. Translations into other languages are not permitted, nor are interpreters allowed for those whose abilities in English or French are inadequate. This is reinforced in one of the questions in the Basic Question Bank:

**B-001-022-005 – Which of the following statements is not correct?**

A candidate with insufficient knowledge of English or French may be accompanied by an interpreter.

RIC-1 allows for other options: “To request an accessibility option not listed in this RIC, . . . please contact the Amateur Radio Service Centre and advise your accredited examiner.”

Other kinds of accommodations must be negotiated between the candidate and ISED. Of course, some AEs may not be able to handle some kinds of accommodations, so they can feel free to decline to conduct an exam. Any candidate always has the option of choosing a different AE or even doing their exam at any of the 21 district offices of ISED. These are listed in ISED’s RIC-66, which you can find on the web.

### Forbidden Transmissions

Non-Amateurs will often ask “what do you talk about?” Anyone tuning across the bands will hear a lot of the same stuff: RST, name, location, rig, antenna, weather. Because Radio Amateurs are people, we will also share a lot of personal info and details of other interests, like sports. Mostly though, we talk about the thing that brings us together: Amateur Radio.

Many Amateurs avoid discussions of politics, religion and sex. These are always good topics to avoid, because the chance of causing offence is very high. These sensitive subjects are embargoed by people who have good judgement, but they are not forbidden. The aversion to discussing these subjects is so strong and so woven into the culture of Amateur Radio that many of us believe there are regulations against it. There are not.

### What the Regs Say We Can Say

Both the International Telecommunication Union (ITU) Radio Regulations and the Canadian Radiocommunication Regulations set some limits on what we Amateurs may do.

The purpose of Amateur Radio is “self-training, intercommunication and technical investigations...” (ITU RR 1.56).

The content of our transmissions is limited to “communications incidental to the purposes of the amateur service... and to remarks of a personal character.” (ITU RR 25.2)

The Canadian Radiocommunication Regulations are more clear about what’s not allowed:

“A person who operates radio apparatus in the Amateur Radio Service may only... be engaged in communication that does not include the transmission of music, commercially recorded material, programming that originates from a broadcasting undertaking, or radiocommunications in support of industrial, business or professional activities.” (Canadian RR 47c).

In the “Regulatory Roundup” column in each issue of *The Canadian Amateur* magazine, I will provide an overview of our regulatory priorities and also discuss some topics of interest.

These restrictions are worth a more careful look. Music, we all understand. “Commercially recorded material” may require some thought. There are many podcasts about Amateur Radio. I listen to several. Some are commercial activities: they are monetized on YouTube or some audio podcast network.

Some podcasts even carry advertising. Should they be available for replay on your local repeater? Probably not. How about content from a broadcaster, like the CBC or your local TV or radio station? Suppose they do a story on your local club’s Field Day effort, or a profile of a local Radio Amateur? It seems to me that re-transmitting this by Amateur Radio would be wrong, but discussing it on the air would be completely fine. So, stop, think and exercise some judgement.

“Radiocommunication in support of industrial, business or professional activities” also deserves a bit of careful thought. We have many “swap nets” on repeaters and in HF nets where Amateurs buy and sell used equipment. Two individual Amateurs making a deal on the air to sell or swap some equipment is an everyday event and quite acceptable. Running a little business buying and selling used gear would be a step too far.

A few years ago, a Radio Amateur who enjoyed sailing was using Winlink to send and receive internet email. From his boat in the Caribbean, he was using the Amateur bands to negotiate the purchase of his next boat from a business. All the emails were exchanged using Winlink on 20 metres by one of the digital data modes. He relied on a Winlink node operated by an Amateur in Nova Scotia.

The Nova Scotia Amateur was, without his knowledge, in violation the Canadian regulations by allowing his station to be used for this commercial transaction. The boater, a Netherlands Citizen, was also in violation of his home country’s regulations, which also forbade these kinds of business communications by Amateur Radio. He became the subject of an enforcement action by Netherlands authorities.

There was a time where “autopatches” were very common on VHF and UHF

Amateur repeaters. Autopatches allowed you to make telephone call using your VHF FM rig if equipped with a touch-tone microphone. A few autopatch repeaters may still exist, but with the ubiquity of cellphones, they seem a bit old hat now.

Calling home over your repeater’s autopatch would be okay. Calling your office? That would be at odds with the prohibition in the regulations against using Amateur Radio for professional activities. How about using the autopatch to order a take-out pizza? No! It may not be your business, but it’s someone’s. Such a call doesn’t belong on Amateur Radio. Stay away from any commercial, business or professional activities.

Mesh networks, like the Amateur Radio Emergency Data Network (AREDN) are a growing, interesting challenge. Most operate in Amateur microwave bands, like 5.6 GHz, where repurposed wireless routers are used with RF amplifiers and gain antennas to provide email and other internet-adjacent services.

The objectives are good: experimentation and preparation for public service in times of emergency. But with the internet just a click away, how can Mesh networks keep the commercial traffic at bay? That’s a big challenge.

Another aspect of the Mesh/AREDN challenge is that much internet traffic uses the https protocol. This uses ephemeral keys to provide encryption and security for traffic.

In Amateur Radio, we are allowed to experiment with encryption, but the keys **must** be published in the public domain, such as on the RAC website at rac.ca/ encryption . With https and ephemeral keys, the keys cannot be published in advance. Amateur AREDN networks **may not** handle any https traffic, and they may not handle any communication in support of a business.

### Over The Horizon Radar

During December and January, I have had several discussions and email exchanges with the Department of National Defence (DND) on the planned Over the Horizon Radar (OTHR) system.

This HF radar system will be installed at two sites in central Ontario and operated by DND to help protect Canada. It is expected to be in operation by 2029.

DND’s operating conditions for this system are set by ISED. Under this authority, DND is specifically excluded from using the HF allocations for three radio services: Amateur, Broadcasting and Aeronautical Mobile.

DND’s proposed system can operate from 4 MHz to 30 MHz. The allocations for Amateur Radio are in seven bands totalling 4,050 kHz of spectrum. Broadcasting has 10 bands totalling 3,770 kHz of spectrum. The Aeronautical Mobile Service has allocations in 10 bands totalling 1,680 kHz of spectrum. That leaves 9,500 kHz of spectrum between 4 MHz and 30 MHz for this OTHR. That’s more than one-third of the entire HF spectrum in 24 different segments. In short, DND doesn’t need our frequencies.

DND has provided Radio Amateurs of Canada with assurances that the OTHR’s frequency management system (FMS) will be programmed to avoid transmissions on frequencies allocated to these three services. DND is aware of the emission bandwidth of their system and will use FMS to ensure no encroachment on Amateur frequencies.

### RAC EMC Committee

Radio Amateurs of Canada has revived a committee of volunteers to provide advice to Electromagnetic Compatibility (EMC) problems. That is a fancy way of describing some of the challenges we face with interference to and from non-Amateur electronics.

The volunteers for the committee are Jason Pasetka, VA5JEP, Ed Richardson, VE4VT and Norm Rashleigh, VE3LC.

All three bring excellent professional experience and practical knowledge of identifying and solving EMC problems.

The EMC committee will offer advice and best practices to deal with interference problems. Watch TCA and the RAC website for more information as this committee develops.