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Amateurs as Professionals

What has my attitude got to do with it?

In a word everything. It is even more important than your radio skills. The attitude of some amateur radio operators leaves much to be desired. Your knowledge in emergency communications is not as important as your attitude during emergencies or when assisting other agencies, etc.

Your technical ability will enable you to do a good job of communicating. But your attitude will determine the success of the overall Amateur Radio effort. The operator who brings a "know it all" or "I will show you just how good I am" attitude will only hamper the relations with the agency or organization. Although we are called amateurs, it does not imply that our efforts are amateurish and anything less than professional. "Professionalism" means getting the job done efficiently - with the minimum of fuss.

Your job is to meet the communication needs of the agency

The people we will be "serving" - remember that word - are professionals that have seen far too many people that are more interested in impressing someone than in getting the job done.

No matter who we serve we are there to solve their communication problems. Do whatever you can to accomplish that goal, and avoid becoming part of the problem.

You will impress them far more by being quiet and doing your job in the best way possible. Results without interference of the agency/organization people, will cement relations with Hamnet.

Remember the following:

Experience is the worst teacher; it gives you the test before giving the lesson.

Hams are independent people and they are volunteers. The attitude among a few hams is that 'volunteers do not have to take orders.' That is absolutely correct. We do not have to take orders, however when you volunteer your services as an emergency communicator, you agree to accept and comply with the reasonable orders and requests from the 'agency'. but if you are not ready to follow instructions, you may want to do something other than be a Hamnet member

Please consider:
- Attitude: manner, feeling, position, with regard to a person or thing,
- Service: the act of helpful activity, help aid,
- Positive: explicitly stated, or expressed.

or more simply stated, A commitment to help others.

Basic Message Handling 2

As I have said before, the use of the ITU phonetic alphabet to spell words
and character groups on voice nets in a manner that is easily understood.
Many English words sound alike but have entirely different meanings. The word "to" as
spoken, for example, could mean the result of one plus one, can mean also, or can mean
a destination, as in "I am going to town." Another word that can be easily misunderstood
is "here." "Here" can be a place or it can be the act of listening, i.e. "I can hear."
The proper meaning becomes apparent if the word is spelt out. Uncommon words or
names can also be misunderstood or misspell. For these reasons, when we communicate
these types of words we need to spell them out.

The three steps for communicating words that need to be spelt out are simple:
1.   Say the word
2.   Spell the word phonetically
3.   Say the word again.

Here's how to do it on air. The sentence we need to send is: "I am en route to your
location with two antennas" I would transmit the following:

**I am en I spell echo November en route I spell Romeo Oscar uniform tango echo
route to I spell tango Oscar to your location with two I spell tango whisky Oscar
two antennas.**

During times of poor conditions, such as heavy interference of high atmospheric levels,
many words may need to be spelt out - even those that under normal conditions would be
easily understood.
When we encounter words that we can not pronounce or are unsure of the proper
pronunciation, we spell them out by saying the prowords "I Spell" and then phonetically
spelling the word.

Numerals are communicated using another proword: "Figures." When we communicate a
number, we precede the number with this proword. For example, the Hamnet net meets
on Figures 145.625 Mhz.

Groups of combined letters and numerals form special cases. If the group begins with a letter, use the proword "I spell" even though there are numbers in the group. Ham call signs are a good example of this. "I spell" "**Zulu Sierra Five Whisky Foxtrot Delta."**

We all make mistakes from time to time. Our tongues get tied, or due to pressure words take on new and unintended meaning. How we correct our on-the-air mistakes can have an effect on communications efficiency. When, for whatever, reason, we make a mistake whilst transmitting a message, the proper way in which to correct the mistake is to use the word 'Correction' How you correct the mistake depends a great deal on what type of information you were sending. If, for example, you were in the middle of spelling a word and phonetically transmitted the wrong character, you should start sending the word again from the beginning. For example, I'm am trying to send the word **'Disaster'**
Disaster I spell Delta India Sierra Alpha Tango Correction Disaster I spell Delta India Sierra Alpha Sierra Tango Echo Romeo.

If you are in the middle of a plain language sentence and simply mis-pronounce or mis-read a single word, go back to the last punctuation mark and retransmit from that point forward. For example:
"Thank you for your message full stop I am available correction full stop I am not available for the takeover full stop"

By going back to the last punctuation symbol, you leave no doubt in the other stations mind where the information you are retransmitting should be placed in the message body.

Sometimes, even under the best conditions, it is necessary to ask for information to be repeated. The words to use when asking for a repeat on a voice net are "Say Again." Those words tell the transmitting station that he/she is going to have to repeat something to you, you can then tell the other station what you need repeated.
Your request can take one of the three forms:

1.   **Say again word after**
2.   **Say again word before**
3.   **Say again from ... to ..**

Say again word after and Say again word before are fairly well self explanatory. If you are missing a single word, we must use this form to request the required information. If however, you missed more than a single word or several words of a sentence, you can give the station the last word before and the first word after the missing information by using the Say again from ... to ... request. It is easier to give an example than to explain. Here is an example. In a message
I received I missed several words of a sentence. What I copied was: "Need ....

at this location."

I transmit the following: "Say again from Need to at." The other station transmits "I Say again from Needs to at ... Need fire tender at this location."

Had I only missed a single word, I would ask "Say again word after Need .. " or Say word before tender ... "

When communicating messages by voice, there will not be many punctuation symbols that you come across. The full stop, comma, colon, semi colon, question mark, at sign, hyphen (dash), forward slash are about the only symbols you will come across. These symbols are transmitted by using the names of the symbols, just as they are written above.

I suggest that you try and use the following prowords in your day to day contacts with other amateurs, and can improve communications efficiency.

- Wait one
- I spell
- Figures
- Say again
- Correction

Voice Nets

Voice nets provide the backbone of emergency communications but are not always the best choice for handling large volumes of traffic, such as might be generated following a large disaster in a populated area. We may have to consider setting up other voice nets to handle the message traffic. The primary Hamnet net, in such circumstances will then be the Command or Control Net. Other nets either voice or digital, if packet radio is used, will be Tactical nets, formed to meet a specific need. As many nets as required by the circumstances can be established.

In cases where Tactical nets are used, the Command or Control NCS needs some way by which to communicate with the Tactical net/so The Command or Control NCS will appoint a standby station. A standby station is someone who will, until otherwise directed, remain on the Control network frequency. When information or message traffic needs to be passed from the Control net to a Tactical net, the standby station contacts the Tactical net where they establish communications and relay the information. Once finished with the information for the Tactical net, the standby station returns to the Control net

1. Network Theory

There are a multitude of forms in use by the various emergency services, traffic authorities, SANDF, and others and they all have the same purpose - and that is to

record the time, location, originator of the message and certain priority codes. Hamnet has designed a basic message form for use during an emergency. When operating with another agency, try to use their forms and procedures for convenience.

3. Characteristics of Messages

a Single v Multiple Destinations

There are major differences between broadcasting and one-on-one exclusive communication channels. Some messages are for one single addressee whilst others are to be received by multiple stations at the same time.

b High Precision v Low Precision

Precision is not the same as accuracy. All messages must be received accurately. But sending a lot of names and numbers requires precision at the character level, while a report that "the fire is out" does not. Both may be important and must be transmitted accurately. But one involves a need for precision.

c Complexity

A doctor at a hospital may use a radio to instruct a field volunteer how to splint a fractured leg. A table at the Comrades may send a report that they need water. The level of complexity varies greatly between these two messages.

d Timeliness.

Some messages are extremely time critical, while others can be sent a little later. Emergency messages must get through without delay.

4. Characteristics of Communication Channels

Now that we have been just through the different message characteristics, let's look at the communication channels that might be used in an emergency.

1. **Telephones**
    1.1   The telephone is good for passing low precision information.
    1.2   The telephone system can quickly become overloaded during a large scale disaster.
    1.3   The system contains wires and cables that can become damaged or destroyed during severe weather, causing the whole network to come to a halt, regardless of priority or how critically the problem is.

2. **Cell phones**.
    2.1   They are simple to operate and do not require a licensed operator. Like telephones they are only suitable for one-on-one communications.
    2.2   Like the telephone the system contains wires, cables and electronic equipment that can become overloaded and/or damaged and destroyed during severe weather or emergencies.
    2.3   There is no "go to a simplex channel" with cell phones.

3. **Facsimile**
    3.1   Fax machines overcome the limitations of voice communications when it comes to dealing with high precision, lengthy and complex information.
    3.2   Fax machines can transfer drawings, pictures, diagrams and maps information that is impossible to transfer over voice channels.
    3.3   Another advantage of the fax machine is that there is a permanent record of the information sent.

4. **Two-way Radios**
Most importantly, radios are self contained and are portable and the number of available communication circuits can be increased as and when the need arises as most radios can operate on multiple frequencies.

5. **Packet Radio**
As mentioned previously, voice modes are ideal for low precision messages. Digital data modes, on the other hand, facilitate high precision message transfer and can ensure near perfect accuracy in transmission and reception. Packet radio can also distribute information to a large number of destinations at the same time.

6. **Other Modes**
Sstv, satellite communications, human couriers, internet, email and other communications all have their own characteristics.

7. **Planning and Preparation - The Key to Success**
    7.1   Once you have identified the ideal mode for the most common messages, the next step to increase the chances that the needed modes will and are available during the emergency.
    7.2   Remember, if you plan for problems, they cease to be problems and become part of the plan.
    7.3   The final step is training. You will be surprised how a little advance planning and effort can go a long way to turn a group into a versatile effective communications team.

Remember the 4 C'S of Emergency Communication

The best advice for anyone doing emergency communications can be summarized by four 'C's: Calm, Courteous, Correct and Concise.

CALM

Try and keep emotion out of your voice. No matter what the emergency situation, a calm professional attitude will help keep things cool and get the message through more quickly and accurately. Losing your cool, calm attitude may cost an important message. The more reason you have for getting excited, the more important it is for you to remain calm. As an emergency communicator, you should set a controlled, calm example for the other people to follow.

COURTEOUS

As an emergency communicator, you must always think of other operators on the nets. Always follow the instructions of the Net Control Station - whether you agree with those instructions or not. NEVER display your temper on the air. Most problems can wait until after the emergency situation is over. If some problem has to be sorted out, do it by phone, or on another simplex frequency, in person etc, but not on the net.

CORRECT

Work to keep errors out of your communications. Use the ITU phonetic alphabet and repeat the message where it is essential to get names, locations, and other information accurately through to the other station. Write down everything for reference. Remember your role is communications. When the Agency or the NCS asks a question, go and get the answer from the person responsible, do not give your best guess. It is always better to admit you do not know rather than give out information that is wrong.

CONCISE

Your job as an emergency communicator is to get the message transferred while also allowing time for other operators to get their messages transferred. Avoid tying up the net by keeping your transmissions as brief as possible. Always leave a few seconds break between transmissions in case someone needs to break in with emergency traffic.
You must consider the conditions - if everyone on the net is being heard well, there is little need to spell common words, but if conditions are not good or the word is unusual or particularly difficult, then it makes good sense to spell it phonetically. Do not rush with your message, speaking a little slower often gets the message through faster the first time because the other operator does not have to ask you to repeat the message. Do not assume everyone has a pen and pad ready when you need to send them a long or complex message - ask first, it saves time in the long run.

EQUIPMENT CONSIDERATIONS

As you build your equipment inventory, you will no doubt have questions about what radios to purchase. Here are a few thoughts on the question.

1. Radios for Emergency Communications should have been around for long enough to have established a good reputation for reliability.
2. Try and stay away from radios that are new on the market, Tried and Tested is Best.
3. Keep radios and equipment that work and sell what does not. Do not change every time a new radio comes on the market, familiarity breeds contempt does not apply in this case. During times of emergency is not the time to learn how to operate all of the functions of a new radio.
4. Look for equipment that is easy to operate, rugged and reliable.
5. Rather have more than one radio, because if your only radio fails, you will have nothing.
6. Try and get a 2 metre mobile radio if possible as they have better simplex capabilities, due to higher power output and external antenna.
    Buy the handheld for 'walk & talk' and as a spare, but rather rely on your mobile set.
7. Mobile radios, whether single or dual-band, should be simple to operate and rugged and the output should be at least 25 watts.
8. Your handheld battery should be able to last a minimum of 12 hours of communications at a 4:1 RX/TX ratio. Carry a spare battery &/or a DC adaptor.
9. Make sure all your radio equipment is in good condition. Faulty or intermittent equipment can be a major problem during an emergency.

Remember: Murphy says things can only get worse.