

Introduction to:  
Traffic Handling – Passing Emergency Messages  
(or Just Plain Old Communicating)  
Revised 5/25/2010 – S. Pituch, W2MY

The art of Passing Amateur Radio traffic is a very broad subject. There are easily 500 pages of useful information on the Internet that one can review and become familiar with if he or she is really serious about becoming a good traffic handler. However, there are a few basic skills and principals that can permit one to pass traffic in a real emergency. We'll go over these basics now, and perhaps we can have an expert in traffic handling lead the training on a future net.

If you think that you can easily pass traffic in an emergency but have not familiarized yourself with the established procedures, then I think that you are in for a shock.

Let me read a quote from the April 2010 QST magazine, page 74: *“A member of my ARES group was deployed to Hurricane Katrina operations. One of the problems he found was that many of the operators who were deployed had excellent go-kits and technical ability but were seriously wanting in traffic handling skill. In one case it took almost 15 minutes to pass one 25 word message.”* The picture on the cover of this magazine shows a doctor arranging for transportation for a critically injured patient in Haiti, while a MARS member looks on. Can you imagine how “15 minutes” in such a situation could be the difference between life and death?

When my son was 12 years old we were at separate locations during a Katy Flatlands Bike Race. He ended up on an overpass where there had been a pileup. With all the adults there, he was the one reporting back to the paramedics at the finish line the vital signs of a biker with serious head injuries. He was superb. He hesitated before he spoke to compose his thoughts concisely and unambiguously, and spoke very briefly on the radio.

The same year he was traveling in a chase vehicle in the middle of an elite group of 100 mile bike riders. He briefly called net control about a train. He then said he would get back to net control later. Later he called in only to say that they took care of the issue. Well, it turns out the riders were about to cross the tracks and the train would have split the contingent in half ruining the race. He was able to flag down the train going parallel to him down the highway and the engineer stopped the train. But he didn't even mention that on the radio because it would not have mattered. He knew that if it could wait until later, then it was not important enough to notify net control and tie up valuable net time.

These are just 2 examples I like to bring up about how to communicate during a net, whether it is for a public service event, or a routine net, or even a real emergency. I will mention a few golden rules I like to stress about traffic handling.

- 1) **Articulate/Enunciate.** Articulate means to utter clearly in distinct syllables. Enunciate means the same thing. Every syllable must be clearly spoken. If not then you shouldn't be passing traffic by voice. If you always sound like you have a mouth full of marbles then you may be better off sending your traffic via a digital mode such as MT63. That's why amateur radio is such a good hobby for kids. It teaches them to enunciate and be easily understood by others, which is the first big step in learning to seriously communicate with other intelligent people.

Speaking slowly helps you to be better understood. Also know the phonetic alphabet. Some letters like "P" and "T" sound the same over the air. Memorize and practice the phonetic alphabet until you don't need to refer to a cheat sheet. See Appendix A.

- 2) **Be concise.** Most people can't speak out a concise unambiguous message off the cuff. They need to rehearse it. If you have time, write the message down and critique it to be sure that it is as concise and brief and as unambiguous as possible. If you do this you will have far less problems sending the message. A follow up question regarding clarifications will rarely be made to you. One thing I do is ask myself: is it brief, and can it be misunderstood? If you don't have time to compose the message (say during a real emergency) take a deep breath and think for a few seconds about what you need to say before pressing the push-to-talk switch. Try to break up each thought into one short sentence.
- 3) **Speak slowly.** This is extremely important. I can say this to someone five separate times during his passing me a message and he will not understand. You must realize that I can only write down a message at about 1/5<sup>th</sup> the rate that you can speak it to me. If I tell you to slow down and you only slow down 50 % then you are still speaking faster than I can write the message down. People who have been in ARES for 20 years will commit this error time and time again. They just don't understand what the problem is. The solution is to print the message clearly on a piece of paper as you speak it. Slow down a bit more just in case the receiving station can not write as quickly as you can. This is one of the most important aspects of traffic handling and is often not followed. Slowing down your speech so that the other station can copy you without the need for fills will actually cut in half the time needed to pass the message.
- 4) **Transmit sparingly.** Do not call net control unless the information is beneficial or essential to the proper performance of the operation. If it can wait until later then save it for when you see the NCS after the event. Of course anything related to public safety is important. Also if the net is involved in a passing a message concerning something more important than your traffic you should be patient and wait. Traffic is normally processed in the order of priority. The more important messages always get passed first.

- 5) **Don't Panic.** This is easier said than done. Try to keep your composure. Breathe in deeply. During a real emergency if you are panicked or in the middle of an adrenaline rush you are technically in shock. Your thinking will already be compromised. Try to do your best. Others on frequency if they really know what they are doing will show compassion and help you get through the event. The ham at the emergency location should always get priority as far as receiving reassurances that he/she is doing a good job and to hang in there. Give him prompts on what to do if he gets too flustered.
  
- 6) **Use the correct format.** Try to familiarize yourself with the two major message formats, the ARRL Radiogram, and the FEMA ICS 213 form. The ARRL Radiogram is a bit daunting at first and you can spend days reading about it and practicing it on the air. The ICS 213 form is much simpler and used by those interfacing with government agencies. If you don't know these formats but you honestly have emergency traffic tell the NCS that you are not familiar with the message format and he can prompt you for the correct information. We will have a National Traffic System expert give us some advice on formal traffic handling on a future net. The first two resources below are very good for learning the ARRL Radiogram format. I recommend that you at least peruse these documents to give you an idea of what to expect.
  - National Traffic System Methods and Practices Guidelines, Chapter 1: The ARRL Message Format,  
<http://www.arrl.org/files/file/Public%20Service/MPG104A.pdf>
  - National Traffic System Methods and Practices Guidelines, Chapter 2: Sending Messages On Voice,  
<http://www.arrl.org/files/file/Public%20Service/MPG204A.pdf>
  - ARRL Radiogram form,  
<http://www.arrl.org/files/file/Public%2520Service/radiogram2.pdf>
  - ICS 213 Form,  
<http://training.fema.gov/EMIWeb/IS/ICSResource/assets/ics213.pdf>
  
- 6) **Get to know other hams.** This may not seem very important, but if you are familiar with hams in your area and you know where they live and what their call signs are, it will make it easier for you to pass traffic to them. You will feel more at ease with hams that you know. This is a good reason for socializing with the other hams in your community. Go to the local meetings, volunteer for the various events, participate in the various nets and talk to other hams on the repeaters. Always practice mutual respect when dealing with other hams, and it will come back to you from others when you need help.
  
- 7) **Follow General Net Procedures.** You don't need to know a lot to be able to participate constructively on a net, even if it is during a public service event or an actual emergency. Usually a formal net will be a "directed" net. All that this

means is that you can only contact the net control station (NCS). He/she is the boss. He/she is responsible for keeping order and getting the information passed in a timely manner. You may not call another station for information unless you obtain permission from the NCS. Simply say: "*NCS call*" this is "*your call*" request comms with "*call sign*". The NCS should acknowledge your request (if you were previously checked in), or ask you to wait if he is busy with something else. Remember the NCS may be juggling several tasks at once with officials, etc, and may not be able to respond to your request immediately. He has a lot of responsibilities so be patient.

Also, if you have to be away from your radio for a while, inform the NCS. This way he won't have to wonder what happened to you if he calls you.

## Appendix A

ICAO Spelling Alphabet (International Civil Aviation Organization)  
NATO Phonetic Alphabet  
International Radiotelephony Spelling Alphabet

developed by the ICAO and accepted by NATO, the ITU, the International Maritime Organization (IMO), the FAA, ANSI, and the ARRL

Letter	Word	Pronunciation
A	ALFA	AL-FAH
B	BRAVO	BRAH-VO
C	CHARLIE	CHAR-LEE
D	DELTA	DELL-TAH
E	ECHO	ECK-OH
F	FOXTROT	FOKS-TROT
G	GOLF	GOLF
H	HOTEL	HOH-TELL
I	INDIA	IN-DEE-AH
J	JULIET	JEW-LEE-ETT
K	KILO	KEY-LOH
L	LIMA	LEE-MAH
M	MIKE	MIKE
N	NOVEMBER	NO-VEM-BER
O	OSCAR	OSS-CAH
P	PAPA	PAH-PAH
Q	QUEBEC	KEH-BECK
R	ROMEO	ROW-ME-OH
S	SIERRA	SEE-AIR-RAH
T	TANGO	TANG-GO
U	UNIFORM	YOU-NEE-FORM
V	VICTOR	VIK-TAH
W	WHISKEY	WISS-KEY
X	X-RAY	ECKS-RAY
Y	YANKEE	YANG-KEY
Z	ZULU	ZOO-LOO

Number	Pronunciation
Ø	ZEE-ROW
1	WUN
2	TOO
3	TREE
4	FOW-ER
5	FIFE
6	SIX
7	SEV-EN
8	AIT
9	NINE-ER