FRS Radio 102
FRS Communications
The saga continues…

Housekeeping

- Please put your microphone on mute

- If you need to take a break, just step away

- If you have a question or comment, type it into the chat function

- Questions – taken at the end

- If you have an FRS Radio Manual, have it ready to refer to

Course Overview

- Radio communication fundamentals
- Talking [Transmitting] & Listening [Receiving]
- Message Handling • Phonics
- What is a radio net?
- How about relay???
- Introduction to Incident Reporting
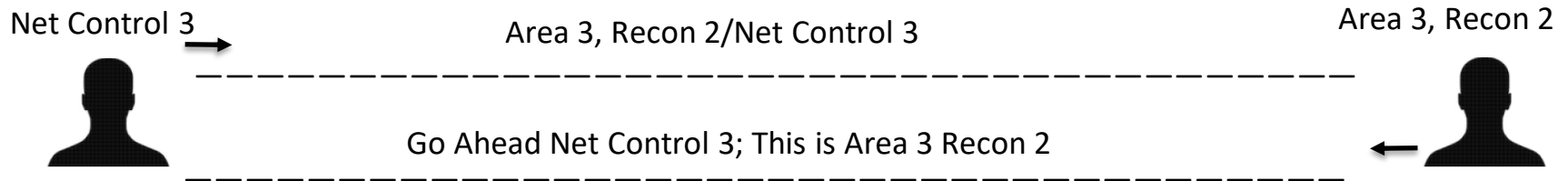 • Prioritizing

Don't forget…

Start with

NO
TONE!

Call Signs & Protocols

The order of a call: "You" This Is "Me"

Their call sign (alert the receiver), your call sign (who is calling)

Net Control 3

Area 3, Recon 2/Net Control 3

Area 3, Recon 2

_____

Go Ahead Net Control 3; This is Area 3 Recon 2

_____

<u>Always</u> wait for acknowledgement before continuing.

The receiving person/station will acknowledge you to let you know they are ready to receive the message.

Talking and Listening

- More than one person transmits at a time on a channel
  - ONLY NOISE HAPPENS!

- When **YOU** are transmitting, you can't hear.

  The radio's receiver is cut off when the transmitter is operating.

- **When YOU talk, no one else can talk.**

  If you talk too long, you may prevent emergency traffic.
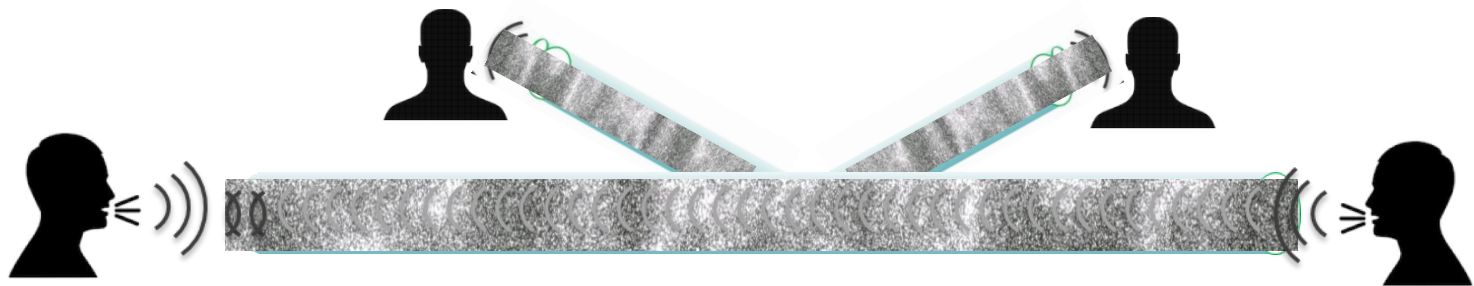
Talking and Listening

To Talk –

- Relax
- Think about what to say before talking
- Hold the radio 3 to 6 inches away from your mouth, speak into the microphone
- Press and **hold** the PTT button
- Pause for a second; then talk
- When finished talking, take a breath and release the PPT button
- **Listen**

When sending a message ...

- Pronounce your words clearly and slowly.

- If necessary, use the phonetic alphabet

- Speak in a normal tone of voice. Do not yell into the radio.

- Keep messages short and to the point.

- Speak in plain English. Do not use slang or codes.

Phonetics Alphabet

Letter	Phonetic Word	Pronunciation	Letter	Phonetic Word	Pronunciation
A	Alpha	*al* fah	N	November	no *vemm* ber
B	Bravo	*bra* vo	O	Oscar	*oss* kar
C	Charlie	*tchar* li	P	Papa	pah *pah*
D	Delta	*del* ta	Q	Quebec	kwe *bek*
E	Echo	*ek* o	R	Romeo	*ro* may o
F	Foxtrot	*fox* trott	S	Sierra	si *err* rah
G	Golf	*golf*	T	Tango	*tan* go
H	Hotel	ho *tell*	U	Uniform	*you* ni form
I	India	*in* di ah	V	Victor	*vik* tor
J	Juliette	*djou* li *ett*	W	Wiskey	*ouiss* key
K	Kilo	*ki* lo	X	X-ray	*ekss* ray
L	Lima	*li* mah	Y	Yankee	*yang* key
M	Mike	*ma* ik	Z	Zulu	*zou* lou

Operating Techniques – Pronouncing Numerals

0 - zero (ZEE-row)

1 - one (WUN)

2 - two (TOOO)

3 - three (THUH-ree)

4 - four (FOH-wer)

5 - five (FY-ive)

6 - six (Sicks)

7 - seven (SEV-vin)

8 - eight (Ate)

9 - nine (NINE-er)

- Multi-digit numbers are spoken as a string of single digits:
  – 600 = "six, zero, zero"
  – 1629 = "one, six, two niner," not sixteen twenty-nine

- Often preceded by the word "figures"
  – "Please copy 109" = "Please copy, figures, one zero niner"
  – "Requesting 16 blankets" = "Requesting, figures, one six blankets"

Phonetics Alphabet

Don't fret if you forget!

A - alfa (AL-fah)
B - bravo (BRAH-voh)
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 (JU-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-ni-form)
V - victor (VIK-tah)
W - whiskey (WISS-key)
X - x-ray (ECKS-RAY)
Y - Yankee (YANG-key)
Z - zulu (ZOO-loo)

RELAX

Any common word that conveys the sound of the letter can work!

(e.g. Baker instead of Bravo for "B")

If there is a chance of misunderstanding, spell it out with "I spell"
- "go to Kay Street" = "go to Kay, I spell kilo alpha yankee Street"

Keep Messages Short, But …

- It is best that messages be kept short
- Lots of info? "Break" it up
  - Use of the word "Break" to split messages
  - Wait/listen for the person to continue

Generally, keep messages to a couple of sentences on busy networks.

If you leave the Net for any reason, you need to let N/C know. Otherwise, they may have to send out a search party for you.

Urgent Messages

BREAK BREAK BREAK!

- Use the words "BREAK BREAK BREAK" if you must interrupt radio traffic with an **urgent message**.
  - *Wait for a pause in conversation*
  - *You say: "Break break break"*
  - *N/C will come back. For example: "Please hold all radio traffic. Break station, Identify yourself and proceed with your urgent message."*
- You must wait for receiving station to acknowledge you before you continue.
  - You can also use the words "PRIORITY MESSAGE" or "EMERGENCY" as appropriate.

What is "Net Control"? (N/C)

- A "Net" is a communication network sharing the same channel and tone settings.

- "Net control" is the person controlling and managing the communication flow.

- Net Control will assign Tactical Call Signs

- A Net Control operator will:

  - Coordinate communications for best efficiency

  - Prioritize use of the net for the most urgent traffic

- Who is your Area Net Controller? (N/C)

Calling Another Person/Station Directly on the Net

- In a "Directed Net", you MUST ask N/C to "go direct" with the other person/station. _After_ you have been given the go ahead, e.g:

  - Say "<their ID>, this is <your ID>"

  - Wait until they acknowledge you!

  - Then you can speak...keep it brief

- When finished, turn it back to the N/C

  Say "<your ID>, back to N/C"

Relays

- Sometimes a person/staton cannot be heard by the N/C.

  - If person/staton has weak signal (trees, tall buildings, low power)

  - N/C may not be in an ideal location or have an ideal antenna (emergency situation, temporary)

- All participants should actively monitor check-ins and acknowledgements to see if N/C misses anyone.

- If you hear an person/staton that your N/C misses, you should relay the information to N/C.

- If you yourself need a relay to reach the N/C, ask for one.

- Do not communicate directly with another person/station on the main channel unless you get the go ahead from the N/C. (Refer to previous slide)

Area 3 Recon 2   Area 3 Traffic 1   Area 3 N/C

Range

Range
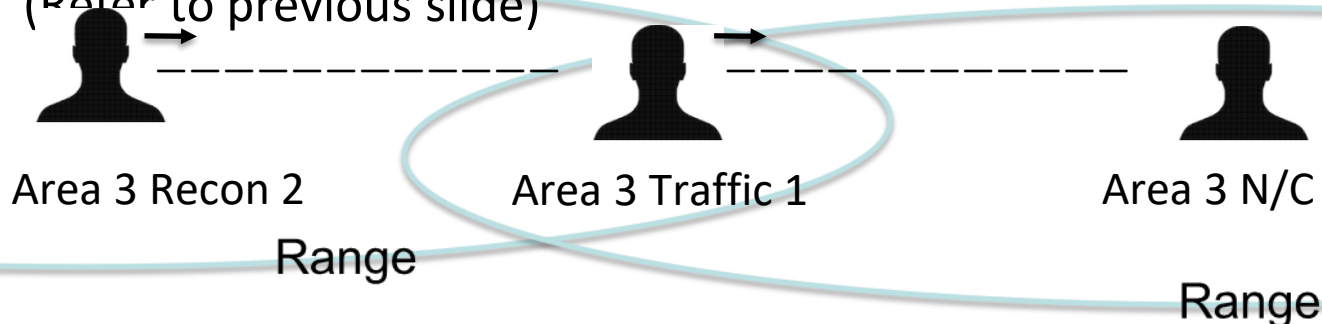
Incident Reporting

Neighbors are the eyes and ears of the neighborhood. Many may complete a survey of their neighbors before reporting to their Incident Command Post, Emergency Assembly Point or Net Control for "duty".

Windshield Survey

ICS 314 for SMC ARES

			1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	2.4	4.1	4.2	5.1		6.1	6.2
Person Reporting		Date																	
Person Receiving		Time																	
	Reference		BURNING	OUT	GAS LEAK	H2O LEAK	ELECTRICAL	CHEMICAL	AFFECTED	MINOR	MAJOR	DESTROYED	DAMAGE	NO ACCESS	Loose Animals		CRITICAL	/ COMPLETE X
Time	**Location/Address**		**FIRE**		**HAZARDS**				**STRUCTURE**				**ROADS**			**Comments**		

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Page __ of __ Pages

Information Prioritization

What First Responders need to know:

- Initial Damage Estimate
- Transportation/ingress/egress: what roads are blocked
- Major hazards: potential to spread
- Where external resources are truly required
- Resources that you can share

Remember:

- *Just because you see something in front of you does not make it important.*
- *Do your best to fully assess a situation before getting on the air.*
- *Other radio operators may have information to relay that is more critical than what you are dealing with.*

Priority of Radio Traffic

Message Handling (in priority order)

1. **Life Safety**

2. **Property/Status**

3. Health and Welfare (Not from N/C)

4. Routine

Don't forget...

Start with
NO
TONE!

Check for Questions

Go fourth and…
Practice, practice, practice…
Nobody is good at something that they never do!

What can you do ?

- Quarterly Citywide Communication Drills
- Neighborhood communication drills (ask your NPC)
- Citywide semi-annual drills

Thank You!

Get ready for RADIO 001 • HAM

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