

Messaging over Amateur Radio



Training module for SNAP

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Emergency Communications

- Radios might be your only link to the City OES
- Use instead of 9-1-1 phone call, but first try to call 9-1-1 from landline phone if available
- Tactical messages
- Formal messages (formatted reports)
- Health&Welfare messages
- Simple packet radio capabilities (like e-mail)

Sunnyvale Amateur Radio Emergency Service (SARES)

- About 100 registered amateur radio operators
- Actively trained, participating in weekly nets or quarterly drills
- 1 Emergency Coordinator and 10 Assistant ECs
- Provide backup communication for DPS OES/EOC
- Call-out to locations per priority assignment list
- Other social activities: Field Day, meetings, luncheons

Message traffic

- Emergency incidents trigger lots of traffic
- SARES is trained to handle messaging for SNAP
 - Accurately, efficiently, timely, with logging
- Communication impairments
 - Limited number of channels
 - Power/equipment/operator shortage
 - Noise, band conditions, environment

Message priorities

- Assign priorities to order messages for transmitting
- EMERGENCY: 9-1-1, immediately life threatening
- P(riority): important, time critical
- R(outine): default, property damage
- W(elfare): inquiries or reports
- Radio operator will not change priority, but EOC might re-prioritize

Tactical messages

- Short
- Unformatted
- Immediate response, two-way

Formatted messages

- Form(s), Report(s)
- long(er)
- Precise
- One-way, routine priority
- Text file(s)

Size of messages and transmission speed (time to transmit)

- Voice: 18 words per minute
- Please make it 25 words or less for formal messages
- Use the same forms on both sides to shorten message and avoid ambiguity

Simple message

From
(Neighborhood IC post)

To
(EOC Logistics branch)

Message
(25 words or less)

SARES message number and time stamp

Exercise:

How short can you make this?

- Turn this into a short message:

This morning I woke up at 7:00am and then had oatmeal for breakfast. The commute to work wasn't too bad and I made it in time for my 9:00am meeting. Shortly after the meeting started an earthquake rattled the building and we felt the shaker very well on the 2nd floor. Everyone kind of panicked and left the building at once but we could not see any structural damage. The fast food place next door was in really bad shape, part of the roof collapsed and it looked like smoke coming from their kitchen. I also heard people screaming from inside there.

Formatted Message (report)

ENAP Safety Assessment Survey

Date:	Time:				Address:	Family:	Type of Home:	Brief Comments:
	Damage:	1	2	3				
	0	1	2	3				
Total								

Damage: 0 - Undamaged
 1 - Minor Damage - Damaged and may be used under limited conditions, may be replaced with minor repairs.
 2 - Major Damage - Damaged to the extent that it is no longer usable, may be restored with extensive repairs.
 3 - Destroyed - A total loss or a total loss due to fire, water, or other cause, with no possibility of repair.

Shortened Form

- Make a Summary from the SNAP damage assessment form:
- 3 houses destroyed (level 3)
- 12 houses severely damaged (level 2)
- 28 houses and 2 businesses light damage (level 1)
- Give total numbers with date and time:
6 people with light injuries as of 11/01/2005 - 1400PST

Health and Welfare Message FSD-244

AMATEUR RADIO DISASTER WELFARE MESSAGE							
Number	Precedence PR	CLASS	Station of Origin	Check ARI	Area of Origin	Time Recd	Date
TO						Message Receipt or Delivery Information Operator and Station _____ Sent To _____ Delivered To _____ Date _____ Time _____	
Telephone Number _____							
(DO NOT WRITE MORE THAN TWO STANDARD TEXTS FROM LIST BELOW)							
ALL ONE	Everyone safe here. Please don't worry.						
ALL TWO	Coming home as soon as possible.						
ALL THREE	Am ... Hospital. Receiving excellent care. Everything fine.						
ALL FOUR	Only slight property damage here. Do not be concerned about disaster reports.						
ALL FIVE	Am moving to new location. Send no further mail or communications. Will inform you of new address when released.						
ALL SIX	Will contact you as soon as possible.						
ALL SIXTY FOUR	Worked only in _____						
Time	Date	Telephone	Signature				
THE AMERICAN RADIO RELAY LEAGUE RADIOGRAM VIA AMATEUR RADIO							
Number	Precedence	CLASS	Station of Origin	Check	Area of Origin	Time Recd	Date
TO						This Radio Message Was Received At: Amateur Station _____ Phone _____ NRPA _____ Street Address _____ City and State _____	
Telephone Number _____							
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
From	Date	Time	To	Date	Time		
RLC'D This message was received via distress by a licensed amateur radio operator whose address is shown in the box at right above. As such, message and address apply to the presence of pending. No compensation can be accepted by the radio operator. A return message may be filed with the "Ham" doing this message to you. Further info:			SLNI The American Radio Relay League, Inc., is the national membership society of licensed radio amateurs and the publishers of QST Magazine. One of its functions is promotion of public service communications among amateur operators to that end. The League has organized the National Traffic System for emergency communications.				

Consider other means of Communication

- Telephone
- Fax
- FRS, GMRS, CB or commercial radios
- Runners (bike) or couriers
- Smoke signals

Thank you



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- <http://www.sunnyvaleares.org/>
- Get licensed! It's free and easy!