

# Communications

Voice The first line of communications.

HF, VHF, UHF. Point-to-point, networks, simplex, repeaters.

Digital There is a computer involved.

Classical - RTTY, PSK-31, etc. Low power can "work the world." Can create a written record.  
Slow transmission rates (but then again, I can not type that fast!). FLDIGI - a software modem to encode and decode signals.

WinLink Express - World wide ham email system that can handle attachments. Internet (telnet) or RF.

D-RATS - If internet, then anyone can use. If radio, then must be a ham with the correct ticket.  
E-mail via internet or WinLink, formatted messages, chat, file exchanges. Slow rates again.  
Written for emergency operations communications. Can go from local to world wide.

D-STAR - Digital VHF/UHF FM radio which can use the internet for world wide communications.  
Icom and Kenwood radios.

APRS - Automatic Packet Reporting System. VHF communications system that can go world wide via the internet. Hierarchy of packet reporting from local on up. Position data, weather reports, etc.  
Can be used for the reporting of the location of field units to Central Sites or to an EOC.

## D-RATS

A computer based communication system written with emergency communications in mind.

Primary communication via internet (anyone can use) with D-STAR back-up (must be a Ham w/ticket).

SF ARES - gives us another way to communicate instead of TESLINK repeaters - coverage, outage.

Log into W5SF Ratreflector and monitor CHAT. Instant communications with anyone who has logged in. It can act like a giant network with everyone who is on-line. FMAC or WX5ABQ (NWS ABQ) monitoring. Communication selectivity can be introduced - see D-RATS training on the web site.

El Paso and KA8JMW are back-up Ratreflectors if W5SF is unavailable.

Can also send email and forms via D-RATS - see D-RATS training on the web site.

Cross platform operability for D-RATS and WinLink using CrossOver with a few limitations (D-RATS maps).

## D-RATS MESSAGE FORMS

### Under Messages – Forms

ICS 213 - (OR Wash. County ARES) Modified ICS 213 - numbered, precedence, orig. station, location, no reply.

ICS 213 - US Standard ICS 213 form w/reply.

Email - messages via D-RATS, internet or WinLink.

HICS 260 -Patient Evacuation Tracking Form.

MEMO – Informal memo form.

Radiogram – ARRL Numbered Radiogram Form.

## Reporting

Reports can be verbal over the radio or written using D-RATS or a form on a web site. The important thing is to get the information accurately to the people who need it. The net control insures the flow of information.

WHAT: What happened?

Quarter size hail covering ground

WHEN: When did this happen?

1210 - 1245 MDT 19 June

WHERE: Where did this happen?

1/2 mi west of US285 MP 287, -105.9101W, 35.5045N

WHO: Who is making the report

Amateur radio operator, Dotty Dash WTF6GCC