Principles of a Net Control Station

Goals:
To minimize the average duration between the time a message is listed with the Net, and the time the message has been sent. To minimize the time length of the Net.

Objectives	Procedure
NCS Must Receive and Transmit well	• If unsure, NCS should begin the net with a check of his/her Sending and Receiving qualities. • NCS should be willing to transfer control to another station if NCS cannot Hear or Be Heard well.
NCS keeps track of stations on the Net, and Net activity	• Establish and use a logging system • Station; Time In/Out, traffic destination/count, traffic Listed/Cleared times, Frequency; station/operator capability (location, modes, frequencies) • Enlist another person as a "logger" for the Net Control person, if needed
Handle highest precedence traffic first	• Handle in the order of: Emergency, Priority, Welfare, Routine
Minimize the "idle" time of Stations with Traffic	• Use other persons to "troubleshoot" the net operation and suggest changes to improve the net operation. • Increase the Throughput of the Net (see below)
Minimize the Net Time of each Station	• Dispatch stations with fewest number of messages first, given equal precedence
Increase the Throughput of the Net	• Minimize unnecessary "chatter" on the Net • Use additional frequency channels for handling traffic • Handle "oldest listed" traffic before later listings • Create dedicated "Send" and "Receive" stations • Create dedicated Point-to-Point Stations • Use faster modes (CW, Pactor, Packet, PSK-31) • Recruit additional stations to the Net • Divide the Net into two Nets
Use all available resources	• Ask for help/advice from Net Stations, if needed • Ask for help from non-Net Stations, if needed • Periodically ask for new check-ins to the Net • Schedule Net Stations and Net Control Station in multi-hour shifts, to minimize operator fatigue

Don Felgenhauer (K7BFL) 03/01/2008

When a Traffic Net Gets Bogged Down . . . .

--- Divide the Net into two separate nets; such as…
- …Two geographic areas (north/south, city/urban, etc.)
- …Two client functions (fire support,/all other support, etc.)
- …Direction of traffic flow (In/Out)
- …Command Net/Working Net

--- Change the Net Control Station if….
- …The NCS is involved with traffic handling or relaying tasks.
- …The NCS is not in solid contact with most net stations.

--- Establish a second station at a location which is handling a lot of two-way traffic; one station for "in" traffic, the other station for "out" traffic.

--- Replace hand copy (pen/pencil) with a typewriter or word processor.

--- Increase the communication ability between net stations…
- …Move the net frequency slightly, to reduce interference
- …Move the net frequency to another Band, for better propagation.
- …Increase the transmitter power output.
- …Check the antenna and feedline connections.
- …Increase the antenna height.
- …Move the antenna outside of buildings.
- …Use a directional antenna.
- …Move the station antenna physical location.
- …Use an antenna with higher forward gain.
- …Change the favored direction of the antenna.
- …Use an antenna with a different polarization.
- …Relay through another station.
- …Establish a cross-band repeater (VHF/UHF)
- …Digipeat through another station (packet).
- …Eliminate receiver “noise” sources.
- …Speak slower….send slower
- …Change the mode of communication.

Don Felgenhauer (K7BFL) 11/29/2000, revised 3/1/2008