

Technical Standard

SEDAN Node Operating Commands

1. Introduction

Gwinnett County Amateur Radio Society (GARS) supports a packet node that is part of the Southeastern Digital Association Networks (SEDAN). This network is designed for supporting keyboard-to-keyboard traffic and is the largest network of packet nodes. The network uses a command structure that differs from typical packet digipeater operations. This Technical Standard is written to provide an understanding of the SEDAN command structure and how it may be used to support emergency communications.

2. Responsibilities

The Assistance Emergency Coordinator (AEC) for Digital Communications is responsible making changes to this Technical Standard as conditions warrant.

3. Related Publications

None.

4. Definition of Terms

AEC	Assistant Emergency Coordinator
ARES®	Amateur Radio Emergency Service® (ARES® and Amateur Radio Emergency Service® are registered service marks of the American Radio Relay League.)
GARS	Gwinnett Amateur Radio Society
SEDAN	Southeastern Digital Association Networks
SSID	Secondary Station Identification
TNC	Terminal Node Controller

5. Standard

The SEDAN network uses a digipeater system in which each digipeater acknowledges each packet and expects an acknowledgement for each packet transmits. It is more like connecting point-to-point with the node becoming an extension of your own Terminal Node Controller (TNC). The SEDAN nodes use TheNet node software. Additional detailed information about SEDAN and TheNet can be found in the materials listed in the References Section.

5.1. Node Call-Signs

SEDAN node call-signs typically end with an Secondary Station Identification (SSID) of -7 to indicate that it is a node. In addition to the call sign with SSID, most nodes also have an alias that identifies the location of the node. The Lawrenceville node has an alias of LVL. You can use either the call-sign with SSID or the alias to connect to a node.

5.2. Available Commands of Interest

The following is a list of commands typically used with the SEDAN node. Other commands are available but not discussed here due to the commands not being used in the local area or the commands are primarily of interest to the system operators. Further information, including explanations of all commands, can be found in the reference materials contained in the Reference Section.

5.2.1. **Bye**

Bye is used to terminate connections. The command must be issued for each connection established in a link. The link is disconnected one segment back toward the command origination point each time the command is issued until the final link is disconnected. An alternative method would be to enter the command mode at the originating TNC and issue a **Disconnect** command.

5.2.2. **Connect**

Connect – used to connect to the serving SEDAN node of the originating station. Once connected, the **Connect** command is again used to connect to the next node or to the terminating station. **Connect** commands are issued in sequence until the destination is reached. The only nodes to which the **Connect** command must be issued are to the serving nodes, i.e., the entry and exit nodes. If a path going through several nodes is required, the network knows that path.

5.2.3. **CQ**

Issuing the **CQ** command generates a broadcast from the node indicating the originating station is actively seeking a connection and will be received by all monitoring station. The **CQ** status remains effective in the **Users** command response for 10 minutes.

5.2.4. **Info**

The **Info** command will return information about the nodes as entered by the node's system operator. It may contain information such as location, elevation, etc. – any information the system operator chooses to provide.

5.2.5. **MHeard**

When issued while connected to a node, the **MHeard** command returns a list of call-signs the node has heard. These can be both stations and other nodes. It allows the station issuing the command to determine who has been on the air recently. The list is typically limited to ten stations or less.

5.2.6. **Nodes**

The **Nodes** command will return a list of all nodes to which the node where the command is issued is connected.

5.2.7. **Routes**

By issuing a **Routes** command to a distant node, you can determine where you can go from that node. It is considered one of the best tools for navigating the SEDAN.

5.2.8. **Talk**

A conferencing feature is available in each SEDAN node. This feature is provided for emergency communications. Any station connected to the same node can issue a **Talk** command and be

connected to the conference. Since the node acknowledges every packet and expects all transmitted packets to be acknowledged, the **Talk** mode creates significant overhead on the channel and can quickly degrade performance. Care must be used in using the **Talk** command during emergency operations to preclude making the channel unusable.

5.2.9. **Users**

The **Users** command will provide a list of stations currently connected to the SEDAN node and their status.

5.3. References

Operators of a packet station should have the instruction manual for their packet station components available for reference.

Horzepa, Stan, WA1LOU, ***Practical Packet Radio***, ARRL, 1995-1998

Sedan Central.org website at www.sedan-central.org

6. Release Information

Stan Edwards, WA4DYD, Emergency Coordinator, is the author of this document. The AEC for Digital Communications will be responsible for maintaining this document.

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