5.3.8.1 List of data link parameters.
This document defines a number of data link parameters for which the system-by-system range of values is determined at network establishment. The actual parameter values selected play an important role in determining the efficiency and effectiveness of the network configuration. It is therefore important to select proper values. Even more important is the need to insure that all participants on a subnetwork use the same parameter values. A bad choice of parameter values can significantly degrade the network performance. Using different values, even if the values are reasonable, can lead to a breakdown of the network precluding interoperability. A list of the parameters and their recommended values is provided in a separate document entitled "MIL-STD-188-220 ~~Protocol~~ Parameter~~s and Values~~ Table". All systems should utilize these values. ~~The maximum number of octets in the information field of a UI, I or DIA PDU is an adjustable data link parameter in the range of 708 – 3345~~. The definitions of the ~~additional~~ parameters for the three types of operation are summarized in 5.3.8.1.1 through 5.3.8.1.~~3~~4.

5.3.8.1.1 Logical data link parameters for all Types.
The logical data link parameters that do not depend upon the Type *of* operation in use are as follows:

a. Maximum number of octets. The maximum number of octets in the information field of a UI, I or DIA PDU is an adjustable data link parameter in the range of 708 – 3345.

b. Maximum Transmit Time (MTT). MTT represents the maximum time allowed on the network for a single transmission. It is the time from when the Radio's Push To Talk (PTT) is activated until the PTT is deactivated. It is used to limit physical and data link frame concatenation only.

~~5.3.8.1.1~~5.3.8.1.2 Type 1 logical data link parameters.
The logical data link parameters for Type 1 operation shall be as follows:

a. Acknowledgment timer. The acknowledgment timer is a data link parameter that shall define the timeout period (TP) during which the sending station shall expect an acknowledgment from a specific destination station. The acknowledgment timer should not be activated until the corresponding PDU has been transmitted. TP shall take into account any delay introduced by the physical sublayer. The value of TP is described in Appendix C (C.4.3).

b. Busy-state timer. The busy-state timer is a data link parameter that defines the time interval following receipt of the URNR command PDU during which the station shall wait for the other station to clear the busy condition. Default value is 120 seconds.

c. Maximum number of retransmissions, N4. N4 is a data link parameter that indicates the maximum number of times that an UI or TEST command PDU is

retransmitted by a station trying to accomplish a successful information exchange. Normally, N4 is set large enough to overcome the loss of a PDU due to link error conditions. The maximum number of times that a PDU is retransmitted following the expiration of the acknowledgment timer is established at protocol initialization. This value is in the range of 0 through 5 and defaults to 2. The retransmission of PDUs may be overridden by the Quiet Mode parameter, which is described in 5.3.11.2.

d. Minimum number of octets in a PDU. The minimum-length valid data link PDU shall contain 2 flags, 2 addresses, one 8-bit control field, and the FCS. The minimum number of octets in a valid data link PDU shall be 9.

e. TEST Time to Live (TTTL). TTTL represents the maximum time to wait to transmit a TEST response frame. A value of 0 indicates that the message ~~should never die~~shall not time out.

~~5.3.8.1.2~~5.3.8.1.3 Type 2 logical data link parameters. (No changes to wording in this paragraph)

The logical data link connection parameters for Type 2 operation shall be as follows:

~~5.3.8.1.3~~5.3.8.1.4 Type 4 logical data link parameters. (No changes to wording in this paragraph)

The logical data link parameters for Type 4 operation shall be as follows:

a. Acknowledgment (T1) timer. The T1 timer is the maximum time a station shall