INTRODUCTION TO PACKET RADIO



By Larry Kenney, WB9LOZ

This series of eighteen articles was originally written in 1988 to appear in *Nuts & Volts*, the newsletter of the San Francisco Amateur Radio Club. The series has been widely distributed since then, with revisions issued in 1991, 1993, and 1995. Occasional revisions were made to this version on the web thereafter, in the late 1990s.

The author is no longer active in packet radio and is unable to provide up to date information on packet radio; however he has left this material on the Internet for access by those who might find it helpful.

CONTENTS

Part	1What Is Packet Radio?
Part	2Getting on the Air With Packet
Part	3TNC Commands - Part 1 of 3
Part	4Digipeaters and Nodes - the basics
Part	5Introduction to the Bulletin Board System
Part	6BBS Commands - Using the Packet BBS
Part	7 <u>Packet Message Addressing</u>
Part	8The Packet Message - A Detailed Look
Part	9Packet Radio White Pages Database
Part	10Using the Node Network - Part 1 of 2
Part	11Using the Node Network - Part 2 of 2
Part	12National Traffic System and Packet Radio
Part	13TNC Commands - Part 2 of 3
Part	14TNC Commands - Part 3 of 3
Part	15Tips for Better Packet Operation
Part	16Packet Radio Review - Quiz
Part	17Packet Radio Review - Answers
Part	18WB9LOZ's Parting Comments

INDEX

Subject	Part	Subject	Part
A		L	

AX25L2V2. 13	Awlen13	List Commands5,6
BBS		
BBS. 5,6 MaxFrame 14 Beacon 13 Mcon 3 Bye Command 6,11 Message Nomenclature 8 Bulletins, Send 6 Message Structure 6 C MFilter 14 Check 13 Meard 14 Check 13 Monitor 2,3,6 Comect 2 Mrpt 3 Converse Mode 2,3 Mstamp 3 CQ Command 11 Mycall 2 Disconnect 2 National Traffic Sys 6,12 Disconnect 2 Node Commands 10,11 Download Command 6 Node Network 4 A Dwait 3 Node Scommand 4 E P Packet Message Parts 8 F Packet Message Parts 8 F Packet Test Answers 17 Frack 3 Packet Test Answers 17 Frack 3 Packet Test Answers 17 Frack 3 Read Commands		Mall3
Beacon 13 Mcon 3 Bye Command 6,11 Message Nomenclature 8 Bulletins, Send 6 Message Structure 6 C MFilter 14 Check 13 MHeard 14 Check 13 Monitor 2,3,6 Connect 2 Mrpt 3 Converse Mode 2,3 Mstamp 3 CQ Command 11 Mycall 2 D N National Traffic Sys 6,12 Disconnect 2 Node Commands 10,11 Download Command 6 Node Network 4 Download Command 6 Node Network 4 A Nodes Commands 10,11 10 Download Command 6 Packet Message Parts 8 F Packet Message Parts 8 F Packet Test Answers 17 Frack 3 Packet Test Answers 17 Face Packet	BBS5,6	
Bye Command 6,11 Message Nomenclature 8 Bulletins, Send 6 Message Structure 6 C MFilter 14 Check 13 MHeard 14 Check 13 Monitor 2,3,6 Connect 2 Mrpt 3 Converse Mode 2,3 Mstamp 3 CQ Command 11 Mycall 2 Digipeaters 4 National Traffic Sys. 6,12 Disconnect 2 Node Commands 10,11 Download Command 6 Node Network 4 Davisonnect 2 Node Commands 10,11 Download Command 6 Node Network 4 Disconnect 2 Node Commands 10,11 Download Command 6 Node Scott Structure 8 Fecho 3 Packet Message Parts 8 F Packet Message Parts 8 F Packet Test Answers 17	•	Mcon3
C MFilter. 14 Check. 13 MHeard. 14 Cmsg. 13 Monitor. 2,3,6 Connect. 2 Mrpt. 3 Converse Mode. 2,3 Mstamp. 3 CQ Command. 11 Mycall. 2 D Mpcall. 2 D Mycall. 2 D National Traffic Sys. 6,12 Disconnect. 2 Node Commands. 10,11 Download Command. 6 Node Network. 4 Dwait. 3 Node Scommand. 4 E E P Echo. 3 Packet Message Parts. 8 F Packet Test. 16 File Directory Cmds. 6 Packet Test Answers. 17 Frack. 3 Packet Tips. 15 Fack. 3 Packet Tips. 15 Gateways. 7 Parameters, TNC. 13,14 Headerln. 3 R Help. 5,6 Hierarchical Address. 7 Retry. 3 I Ident. 11 S S I Send Commands. 6 Introduction. 1 Status Command. 6 Introduction. 1 Status Command. 6 Introduction. 1 TNC. 1,2 V Via. 2 W White Pages. 9 8		
Check 13 MHeard 14 Cmsg 13 Monitor 2,3,6 Connect 2 Mrpt 3 Converse Mode 2,3 Mstamp 3 CQ Command 11 Mycall 2 D N National Traffic Sys 6,12 Disconnect 2 Node Commands 10,11 Download Command 6 Node Network 4 Dwait 3 Node Scommand 4 E P Packet Message Parts 8 F Packet Message Parts 8 F Packet Test 16 File Directory Cmds 6 Packet Test Answers 17 Frack 3 Packet Test Answers 17 Facke 3 Packet Test Answers 17 Facke 15 Packet Test Answers 17 Facket 15 Packet Test Answers 17 Facket 15 Read Commands 5,6 Retry 3 Retry 3 Identify 11 <td>Bulletins, Send6</td> <td>Message Structure6</td>	Bulletins, Send6	Message Structure6
Cmsg. 13 Monitor. 2,3,6 Converse Mode. 2,3 Mrpt. 3 CQ Command. 11 Mycall. 2 D N National Traffic Sys. 6,12 Noigipeaters. 4 National Traffic Sys. 6,12 Disconnect. 2 Node Commands. 10,11 Download Command. 6 Node Network. 4 Dwait. 3 Nodes Command. 4 E P Packet Test. 16 Folie Directory Cmds. 6 Packet Test. 16 File Directory Cmds. 6 Packet Test Answers. 17 Frack. 3 Packet Test Answers. 17 Frack. 3 Packet Tips. 15 Facten. 3 Parameters, TNC. 13,14 Headerln. 3 R Help. 5,6 Read Commands. 5,6 Hierarchical Address. 7 Read Commands. 5,6 Hierarchical Address. 7 Read Commands. 6 J Command. 6 TNC. 1,2	•	-
Connect	Check13	MHeard14
Connect	Cmsg13	Monitor2,3,6
CQ Command 11 Mycall 2 D N National Traffic Sys. 6,12 Disconnect 2 Node Commands 10,11 Download Command 6 Node Network 4 Dwait 3 Node Network 4 Dwait 3 Nodes Command 4 E P Packet Message Parts 8 F Packet Test 16 Facket Test Answers 17 17 Frack 3 Packet Test Answers 17 Frack 3 Packet Tips 15 Faclen 3 Parameters, TNC 13,14 Parms 11 11 11 Headerln 3 R Read Commands 5,6 Hierarchical Address 7 Read Commands 5,6 Hierarchical Address 7 Retry 3 Routes 11 1 Introduction 1 Status Command 6 K U U Kill Commands 5,6 Unproto 3 <		Mrpt3
D	Converse Mode2,3	
Digipeaters 4 National Traffic Sys 6,12 Disconnect 2 Node Commands 10,11 Download Command 6 Node Network 4 Dwait 3 Node Scommand 4 E P Echo 3 Packet Message Parts 8 F Packet Test 16 File Directory Cmds 6 Packet Test Answers 17 Frack 3 Packet Tips 15 Facket Tips 15 Packet Tips 15 Facket Tips 15 Packet Test Answers 17 Packet Tips 15 Packet Tips 15 Facket Tips 15 Packet Tips 15 Facket Tips 15 Packet Tips 17 Facket Tips 15 Packet Test Answers 17 Facket Tips 13 Retry 3	CQ Command11	Mycal12
Disconnect 2 Node Commands 10,11 Download Command 6 Node Network 4 Dwait 3 Nodes Command 4 E P Echo 3 Packet Message Parts 8 F Packet Test 16 File Directory Cmds 6 Packet Test Answers 17 Frack 3 Packet Tips 15 Facket Test Answers 17 15 Packet Tips 15 11 Read Commands 5,6 Retry 3 Retry 3 3 Routes 11 11 Introduction 1 5,6 11 Introduction 1 5,6 11 Introduction 6 TNC 1,2 Introduction 1 5,6 Introduction 3 Introduction 1<	D	N
Download Command 6 Node Network 4 Dwait 3 Nodes Command 4 E P Echo 3 Packet Message Parts 8 F Packet Test 16 File Directory Cmds 6 Packet Test 15 Frack 3 Packet Tips 15 Frack 3 Packet Tips 15 Face Paclen 3 Paclen 3 13 Parameters TNC 13,14 Parms 11 11 Headerln 3 Read Commands 5,6 Hierarchical Address 7 Retry 3 Routes 11 11 11 Introduction 1 5,6 11 In	Digipeaters4	National Traffic Sys6,12
Dwait 3 Nodes Command 4 E P Echo 3 Packet Message Parts 8 F Packet Test 16 File Directory Cmds 6 Packet Test Answers 17 Frack 3 Packet Tips 15 G Paclen 3 Gateways 7 Parameters TNC 13,14 Headerln 3 R Help 5,6 Read Commands 5,6 Hierarchical Address 7 Retry 3 I Routes 11 Info Command 6,11 Send Commands 6 Introduction 1 Status Command 6 J T T T J Command 6 TNC 1,2 K U U Kill Commands 5,6 Unproto 3 Kill Commands 5,6 Unproto 3 Via 2 W White Pages 9 8 <td></td> <td>Node Commands10,11</td>		Node Commands10,11
E	Download Command6	Node Network4
Echo	Dwait3	Nodes Command4
File Directory Cmds	E	P
File Directory Cmds	Echo3	Packet Message Parts8
Frack	_	
G Paclen 3 Gateways 7 Parameters, TNC 13,14 H Parms 11 Headerln 3 R Help 5,6 Read Commands 5,6 Hierarchical Address 7 Retry 3 I Routes 11 Ident 11 S Info Command 6,11 Send Commands 6 Introduction 1 Status Command 6 J T J Command 6 K Kill Commands 5,6 Kiss 13 Upload Command 6 Users 11 V Via 2 W White Pages 9 8		
Gateways 7 Parameters, TNC 13,14 H Parms 11 Headerln 3 R Help 5,6 Read Commands 5,6 Hierarchical Address 7 Retry 3 I Routes 11 Ident 11 S 11 Info Command 6,11 Send Commands 6 Introduction 1 Status Command 6 J T T T J Command 6 TNC 1,2 K U Unproto 3 Kiss 13 Upload Command 6 Users 11 V Via 2 W White Pages 9 8	Frack3	
H	_	
Headerln 3 R Help 5,6 Read Commands 5,6 Hierarchical Address 7 Retry 3 I Routes 11 Ident 11 Send commands 6 Introduction 1 Status Command 6 J T T J J Command 6 TNC 1,2 V Kill Commands 5,6 Unproto 3 Upload Command 6 Users 11 V Via 2 W W White Pages 9 8	Gateways7	
Help		
Hierarchical Address.7 Retry		==
I Routes		•
Ident. .11 S Info Command. .6,11 Send Commands. .6 Introduction. .1 Status Command. .6 J T TNC. .1,2 K U Unproto. .3 Kill Commands. .5,6 Unproto. .3 Kiss. .13 Upload Command. .6 Users. .11 V Via. .2 W White Pages. .9 8		-
Info Command 6,11 Send Commands 6 Introduction 1 Status Command 6 J Command 6 TNC 1,2 K U Unproto 3 Kiss 13 Upload Command 6 Users 11 V Via 2 W White Pages 9 8	-	
Introduction		_
J Command	•	
J Command		
<pre>K Kill Commands5,6 Kiss13 Upload Command6 Users11 V Via2 W White Pages9 8</pre>	_	_
Kill Commands 5,6 Unproto 3 Kiss 13 Upload Command 6 Users 11 V Via 2 W White Pages 9 8 8		
Kiss 6 Users 11 V Via 2 W White Pages 9 8 8		•
Users11 V Via2 W White Pages9		
V Via2 W White Pages9 8	Kiss	
Via2 W White Pages9 8		
W White Pages9 8		•
White Pages9 8		
8		
Index by har Godffey, North ODICCONV	Index by Hal Godfrey NAAN	•
	Index by har Goursey, Norm	0D1 00011V

COPYRIGHT AND MISCELLANEOUS INFORMATION

The eighteen parts of this "Introduction to Packet Radio" are not copyrighted. They may be copied, printed, duplicated, distributed, and published in newsletters without further permission from me. I, however, request the following:

- that I be given credit for writing the material
- that none of the content, including callsigns, be changed
- that it be stated that the latest edition of the series is available in its entirety at this website (http://www.choisser.com/packet/)
- that on the Web, links be made to this site rather than posting copies (so the latest edition will be read by packet users).

This material is no longer actively updated, although corrections to outdated information are welcome.

73, Larry Kenney, WB9LOZ Write Larry

Main Packet Radio Page

First Part