

E-MAIL ASSIGNMENT #6 – Connect scripts; prioritizing channels in Paclink AGW; making nested connect scripts when simple one-line connects are not adequate.

NOTE: No matter if you only have Airmail or Paclink AGW – this lesson will expose you to packet networking in Florida beyond packet 101! It may take some patience!

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REQUIREMENTS: Working packet station on one of the three LANS in E. Central Florida with Winpack or another terminal program and Airmail or Paclink AGW.

Note: Those with Airmail only should do this exercise with Winpac or a favorite terminal program.

INFORMATION: After testing to be sure they get the needed results, storing connect scripts for retrieval can be handy and time-saving. Paclink AGW uses *channels* for this purpose. Each channel has an implied or explicit imbedded connect script and all the operator has to do is select the desired channel from a list and click on it. Priority channels 1-5 may be set up so that all is automatic when the first channel, or the next, etc. fails for what ever reason.

Airmail connect scripts are limited to what can be placed in the small narrow *CONNECT TO* window on a single line. All scripts there are saved and will be in the pull-down arrow to the right for quick retrieval.

Winpack can also store connect scripts. To make and save connect scripts for Winpack, click on HELP then CONTENTS/SEARCH. Search for 'scripts'; SHOW TOPICS- "*Scripts How They Work.*" In this exercise we will use Winpack in *keyboard mode* to test scripts but not save them in Winpack unless you want to do that on your own.

In previous assignments we learned how to make a single-line connect script. Such may include only the target for a direct link or may include an intermediate node with attendant network addressing or one or more digipeaters or both nodes and digipeater. To the extent the Florida Layered Packet Network extends from one LAN to another only a single line connect script is needed as the FPAC/ROSE system manages the addressing through intermediate network nodes.

However, there are places in the state where the Florida Layered Packet Network has been extended or even tied together by the use of a different type of node/switch. These may include TheNet, X1-J, PCFlex, and the Kantronics KA NODE system. FPAC addressing cannot be automatically propagated through these nodes. In order to connect from one FPAC LAN to beyond the extent of the FPAC network, it is necessary to develop *nested* connect scripts.

When you connect to any node, the node will respond with some fixed text indicating which node it is, station ID, or perhaps some other information. At that time the node is awaiting a keyboard command. Most nodes respond with a unique text (i.e. the call letters of the node and possibly other information.) AX.25 protocol requires that the connecting station receive as a minimum a notice of connection such as

```
*** CONNECTED With Station N0IA-8
```

The only thing unique about that response would be the call letters of the target.

FPAC NODES generally respond to keyboard connections with something like this:

```
*** CONNECTED With Station N0IA-8
connection in progress...NODE -0
Connected to NODE-0 @ 3100386335
[DWJ-2.0r5-C]
NODE : N0IA-9
Position: !81.304W/29.039NxF144.910
Type <ENTER> or ? for COMMAND help.
N0IA-9 @ 13:09:27
: (A,B,C,H,H(num),HL,I,L,M,R,RX,S,T,U,UX,?) >
```

There are a few unique words or lines there that could not be confused with another node - you would know you have made the right connection when those appear.

Here is the response when connecting to the KA NODE at the Altamonte Springs EOC:

```
###CONNECTED TO NODE K4FUY-7(K4FUY-4) CHANNEL A
Welcome to the KA-NODE at Altamonte Springs. Connect to N4PLZ-8 for FPAC Nodes
ENTER COMMAND: B,C,J,N, or Help ?
```

There is sufficient unique text there to confirm that you are connected to the node to which you intended. Later, you will use a short text string to test to be sure you are linked and use that as a confirmation response. The last line would not be unique as many KA Nodes present that same line.

INFORMATION – In Paclink AGW, so long as you can reach the target Telpac Node with a simple connect command the only call you need to fill out in CHANNELS/Packet/Packet Properties is the REMOTE CALL SIGN (the final target.) This results in an imbedded/implied connect request

C <target>

Where a series of nested connect commands is needed, the connect commands and resulting confirmation response from each intermediate link are established in the EDIT section of the Packet Properties section.

Rule #1 – Each odd-numbered line must be a connect command (i.e. C <target>.)

Rule #2 – Each even-numbered line must contain a unique part of the response resulting from the successful connection from the previous command. Once this confirmation is made, the next odd numbered line, a connect command, will be automatically sent.

Rule #3 – In most cases it is necessary to have an even number of lines – connect/response pairs; one connect line, one response line.

(The lines are not numbered in the editing script, per se.)

Hint: In even-numbered lines, keep the expected response text short (if unique that is all that is needed,) and use a short unique string from as late in the response as possible.

Assignment 6A – This is a keyboard exercise to check paths, confirmations, etc. by connecting to a KA Node and then to a Telpac Node. Step One depends on your network access point (LAN.)

Step One:

On 145.07 (Orlando LAN 407277)
C K4FUY-7

On 144.91 (Deland LAN 386335)
C K4FUY-7 V N0IA-9, 407277

On 145.05 (DAB LAN 386677)
C K4FUY-7 V N4WKQ-5, 407277

You will see a response / confirmation of your connect success as noted earlier.

Step Two: While connected to the KA Node, issue a connect request to the N1FL-10 Telpac Node at the Seminole County EOC

C N1FL-10

That will “LINK” you to the Telpac node – as a keyboarder. You can B(ye) off the Telpac node once you see the > prompt. It may take a while for the link to be dropped.

Assignment 6B – Paclink AGW: In Paclink AGW/Channels/*Packet* – Overwrite <Add New Channel> with a channel named “N1FL-10 Telpac v K4FUY-7 nnn.nn” where nnn.nn is the frequency your radio is on to make this link. Set this as Priority 5 and ENABLE.

In *Packet Properties*:

REMOTE CALL SIGN N1FL-10

Click on EDIT

In the small editor window type in the connect line to get to the KA Node

In the second line put the short magic phrase that confirms the KA node

In the third line put a connect line to get to your target

In the fourth line put the magic phrase that confirms the target

Be sure and include an ENTER key after the last line.

UPDATE

Select the AGW Port you want

Leave all else defaulted and click ADD NEW CHANNEL and CLOSE.

Now in Paclink AGW/Connect, pull down the arrow and click on this new channel and watch the progress.

Make any changes required to make it work, using UPDATE THIS CHANNEL and CLOSE after making any changes.

Assignment 6B Those with Airmail Only: Develop a nested connect script / responses that would take you from your LAN in E. Central Florida to the

N1FL-10 Telpac node through the K4FUY-7 KA Node in Altamonte Springs. Save it as a disk file.

Assignment 6C– Using Winpack or your favorite terminal program in keyboard mode investigate getting to the KC4OUA-10 Telpac Node in Jacksonville from one of the LANS in E Central Florida through two intermediate X1-J nodes north of St. Augustine. The various nodes/switches in this path may include Orlando and DeLand FPACs, DAB and St. Augustine ROSE, W4IZ-2 and W4JAX-7, two X1-J nodes between St. Augustine and the targetm KC4OUA-10 in Jacksonville.

Step ONE - Connect to the W4IZ-2 node that is listening at address 904829 on the FPAC network. This will take advantage of FPAC/ROSE automatic addressing through E. Central Florida to just beyond the St. Augustine network switch.

HINT: Your connect line is going to look something like this:

```
C W4IZ-2 V <local switch call>, 904829
```

NOTE: For those on 145.07 too far south from Deltona to reach the N4PLZ-9 switch you'll have to use the AEOC digi or the K4FUY-7 KA Node at Altamonte Springs EOC to get to the <local switch.>

```
C W4IZ-2 V AEOC,<local switch>,904829
```

will work through the AEOC digi. Be patient as this has to go to and return from just south of Jacksonville through three switches.

NOTE: You will only get one line back *from* the W4IZ-2 node. The first

```
“*** CONNECTED With Station W4IZ-2
```

line after your command is the local switch telling you it knows how to get to 904829. Then you'll get a

connection in progress...

line from the local switch. The next CONNECTED line is the only line that the W4IZ-2 node actually returns. You are now a keyboarder on that node and it is looking for a command.

Step TWO: Send a single question mark (?) to learn what commands are available on this node.

Step THREE: Investigate the N(ode) command

Step FOUR: Find the call letters for the JAXFLA: node

Step FIVE: Issue a connect command for that call, and watch for the return line – only one line will be returned. You are a keyboarder on that node.

Step SIX: Investigate the MH(heard) command on this node. Look for Telpac Stations with -10 ssids.

Step SEVEN: Issue a connect command to the KC4OUA-10 Telpac node and watch for the return lines.

You will be a keyboarder on the KC4OUA-10 Telpac node. You can Bye off or Disconnect. (Bye may take you backwards through the links you made to get here and you'll have to Bye off each one in succession.)

Assignment 6C Paclink AGW - In File/Channels/packet make a new account to get to the KC4OUA-10 Telpac node from the LAN you are on.

In the Packet Properties – EDIT – make a connect script to get to the target.

Test this out to be sure it works; fix any problems until it does.

Assignment 6C Those with Airmail Only: Make a disk file of a proposed connect script sequence to get from an E. Central Florida LAN to the KC4OUA-10 Telpac Node in Jacksonville.

REPORT: Using your winlink.org e-mail accounts, send an e-mail to NOIA-11@winlink.org with the following information:

Assignment # 6 Results

Base @winlink.org mycall/account

Text of connect script for Assignment 6B

Text of connect script for Assignment 6C

What is the mycall of the EAGLE: node at W4JAX-7?

Enjoy

73,

bud NOIA

386 574 4124

386 956 0386 Sprint Cell