## **Radio SW Operation Instructions**

## **POWERING UP THE COMPUTER & BEGINNING TEST**

1. Power switch on Using switch on the side of the computer (upper right)

Computer boots up into Windows

2. CNTL-ALT-DEL to begin windows Login

3. Username: Modular Login to Windows Password: modular (lower case)

4. Linux Double click on Linux icon on the desktop

This brings up the Linux Operating system under VMware

5. "Power On button" – one click

In VMware click once on "Power On" button in the upper left.

vmware will boot up (this will take a while)

6. CNTRL-ALT-ESC and then This changes cursor from Windows back into Linux window. Cursor should now be a square (not an arrow)

window. Cursor should now be a square (not an arrow)

7. colunga-1 login: mms type "mms" for login to vmware

password: modular type "modular" for password to wmware

should get the: **colungavm-1:mms**\$ Prompt

8. pswd –r BOOTDIR=/taz/boot Must change the boot directory

9. (Power up radio and Hub)

UUT must be powered up before the next command.

10. pswtip Load the Hub interface driver

should get the: <u>arm Boot (roadrunner)</u>, V2.6.003-r > prompt

11. net/scripts/test-radioa-new Intializes the test program (for radio A) or for radio port B use

net/scripts/test-radiob-new (repeater is always radio A).

wait for 20 seconds while script runs. when finished execute the "pa dump" or the "pb dump" command to verify registers and verify

communcations with radio are okay.

## VALID TEST PROGRAM SETTINGS:

Note: "pa" is if using radio A port. If using radio B port use "pb".

Note: The following prompt will be present before each command: arm Boot (roadrunner), V2.6.003-r >

pa Lists the program settings. Intially all defaults will appear

pa dump Dump registers out of the BBP

Verify 1<sup>st</sup> 3 are: D2 00 07

pa setdac:xx where xx is 0 to 255. This is the DAC setting that controls

the output power level.

pa cnt:xx where xx is 1 to ??. This is the number of packets to TX

The default is 1000 packets. (3 seconds of transmitting) Note: 5000 packets of length 250 (default length) results in

about 15 seconds of transmitting.

pa size:xx where xx is the number of bytes per packet (default is 250)

Valid range is from 1 to 1000

pa chan:xx where xx is from 1 to 10. This is the 802.11b DSSS

channel of operation. Defualt value is channel = 5

pa set Must invoke this in order to make the channel change valid

pa dly:xx Delay in mSec between packets sent out

pa randdata:1 Enable random data function for TX

pa randdata:0 Disable random data function for TX (then 0x55 is always sent)

## **EXITING AND SHUTTING DOWN THE COMPUTER**

1. Exit type "exit" to get to colungavm-1: mms\$ prompt

2. su type "su" to login as super user

password: <u>roadph@se2</u> enter password of <u>roadph@se2</u>

Should get the **[root@colungavm-1 mms] #** Prompt

3. /sbin/shutdown –h now shutdown linux & vmware

4. "X" to close vmware window click on "X" in upmost right of window to close vmware

5. Start – Shutdown Exit Windows (if desired)

6. Power Down Switch on right side of computer (upper right)