Bursts, Commands and Passwords

The Linkway network uses a series of bursts to establish/maintain timing and to pass data.

– **Reference (RB)** – Carries NCC commands and timing feedback to the network and establishes receive timing.

– **Acquisition (AB)** - From TT's to the NCC to establish network timing, only used when a TT enters the network.

– **Control (CB)** – From TT's to the NCC to update the NCC of TT status, the NCC uses this burst to maintain timing, and updates the TT's during the next RB.

– **Signaling (SB)** – TT bandwidth requests to the NCC. Also known as Aloha bursts, a TT can transmit at any time. May result in collisions. In the case of collisions, MRT will reset timing and TT's will again access network at random times.

– Traffic (TB) – Data carrier from TT to TT.

Linkway Console Commands

• **cb:** the clear burst command will erase all burst statistics

• **cw** –freq (frequency in HERTZ of L-band output from cut sheet) – power -30: this command typed into the computer that is linked by blue cisco cable to the modem puts up a carrier wave (CW) "spike" at a certain frequency (calculated in hertz) with a power level of -30.

• **cw –power -20**: raises or lowers the CW power level

• **hw**: typed on the NMS in the hyperterminal application for a

hardware reset of the TDMA modem once the boot file is loaded

• **makeboot**: typed into the NMS to make boot files for the TDMA modems in the network.

• **ncc_start**: typed into the SUN server to start the NCC processes.

• **ncc_stat**: typed into the SUN server to check Process ID (PID). The server is fully running once all the PIDs are populated.

• **ping**: a computer network tool that tests whether a particular modem or other IP enabled hardware if reachable across an IP network.

• **rb**: displays the reference burst statistics of the modem. Used to power balance the MRT.

• **rbtp**: lists the terminal ID, transmit and receive terminals and all other relative carrier information

• **rx**: displays the receive status of the modem to include if the receive is synched and the number of errors (actual or corrected)

• **show_ber**: displays the raw bit error rate statistics of the modem or Network

• **shutdown –i5 –g0**: an orderly shutdown command for the SUN server that shutdowns all the processes and turns the power off

• **tx**: displays the transmit status of the modem the modem is transmit synched to the MRT or is searching for the network and the number of times the modem lost transmit synch with the MRT.

• **cacmodeminfo** – Allows the operator to view the status of the ODU

(outdoor Unit), BUC/LNB power, LNB reference, etc.

• **dbpr ipifconf** – Allows the operator to view the IP configuration of the modem. Will only be available after the modem is TX and RX synched.

• **dbpr siteconf** – Allows the operator to view the site configuration of the modem, latitude and longitude settings

• **rt** – Allows the operator to view the IP route of the modem, should correspond with the configured PVC. Will only be available after the modem is TX and RX synched.

• **tc** – Allows the operator to view the terminal configuration of the modem, tx power, bandwidth, etc.

NMS FTP Commands

• **bye**: ends the FTP application and returns you to the DOS prompt

• **close**: Stops an FTP connection with an FTP server (MRT/AMRT in this case)

• **ftp**: the command that starts the file transfer protocol operation

• **get**: transfers one file at a time

• **ls**: lists files in the directory you are in

• **mget**: transfers more than one file at a time

• **open**: starts an ftp connection with an ftp server (MRT/AMRT in this case)

• **pwd**: tells you what directory you are currently in

Passwords

NCC and FTP: User = linkway
Password = datapath1

NCC as Superuser: User = su
Password = root

NMS: User = linkway
Password = linkway

Intro for laptop: User = datapath
Password = datapath

Or

User = xadmin
Password = datapath