SIMREX CORPORATION

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STORE AND FORWARD REPEATER with SNRDS radios.

In the network setup shown in Fig. 1, the Master transceiver must be able to talk with receivers R1, R2 and R3 through the digipeater and also be able to talk to R4 and R5 through normal broadcast mode. In doing so all receivers must only receive and transmit information through their given paths and not obtain information twice either by the digipeater or through normal broadcast air travel. To configure this network to work properly we must incorporate "filters" and "via" parameters within certain receivers. This is done in the following manor:

First, all radios must be given a specific address for identification. This is done by typing SC at the command prompt followed by the chosen address.

Next, set up the "master" radio. At the command prompt type OA followed by the radios address. Hit space bar which will display a 0. Hit space bar again and a series of letters will appear. Type M for that desired filter followed by an E to enable it. This will in effect eliminate any echo of data. Press space bar and a series of "dashes" will appear. This is to load another address in the filter file. Type "ENTER" to bypass. Back at the command prompt type SV followed by the digipeater address and then 3 carriage returns util back at the conmmand prompt. This will set the VIA mode. Lastly, at the command prompt type OM followed by E for enable. This completes the "master" radio setup.

Next, set up the radios which will communicate through the digipeater. As described above, follow the procedure for setting up OA. Also set up OM and SV as described above. Next, type OT and set M to S for select. All other letters will have an R as a suffix for reject. This completes the setup for the radios that will communicate through the digipeater.

Next, set up the non-digipeat radios. Set up the digipeat address in OA as described above. Configure this address so that M is set to D for disable and V to E for enable. In the non-digipeat radios there is no need to set the SV via routing. Also set OM to D for disable.

Lastly, set up the parameters for the radio that will digipeat. There are several other parameters shown below that must be set such that the digipeater will also output the data from the Master out of it's serial port to the RTU connected to it. The filter used here is designed such that only data from the Master will be sent out of the digipeaters serial port to the RTU.

R4

OA=digi address
    md ve dd cd pd
OM=d
OT = mr vr dr cr pr

OA=digi address
    md ve dd cd pd
OM=d
OT = mr vr dr cr pr

R5

Master

SV =digi address
OM=e
OA=master address
    me vd dd cd pd

Digipeater

MG=e
OH=d
OU=d
OR=e
SE=d
OL=d
MV=e
OA=master address
    me vd dd cd pd
OT= ms vr dr cr pr

R1

SV =digi address
OM=e
OA = master address
    me vd dd cd pd
OT = ms vr dr cr pr

R2

SV=digi address
OM=e
OA = master address
    me vd dd cd pd
OT = ms vr dr cr pr

R3

SV =digi address
OM=e
OA = master address
    me vd dd cd pd
OT = ms vr dr cr pr