```
; Radio Repeater configuration file (for use with app_rpt)
; Your Repeater
;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;
; This is where you define your nodes which can be connected to.
;

[nodes]
; Note, if you are using automatic update for allstar link nodes,
; no allstar link nodes should be defined here. Only place a definition
; for your local nodes, and private (off of allstar link) nodes here.

1331 = radio@127.0.0.1:4569/1331,NONE    ; This must be changed to your node
number
; 1335 added by raa ****************
1335 = radio@127.0.0.1:4569/1335,NONE    ; and iax port number if not the default

; ************** Start of Node 1331 **************** raa

[1331]                              ; Change this to your assigned node number

                                        ; Must also be enabled in modules.conf
                                ; Rx audio/signalling channel. Choose ONLY 1 per node
stanza

                                ; Enable the selected channel driver in
modules.conf !!!
; rxchannel = dahdi/pseudo           ; No radio (hub)
rxchannel = SimpleUSB/usb_1331       ; SimpleUSB
; rxchannel = Pi/1                   ; Raspberry Pi PiTA
; rxchannel = Radio/usb_1331         ; USBRadio (DSP)
; rxchannel = Dahdi/1                ; PCI Quad card
; rxchannel = Beagle/1               ; BeagleBoard
; rxchannel = USRP/127.0.0.1:34001:32001; GNU Radio interface USRP
; rxchannel = Voter/1331             ; RTCM device


duplex = 2                              ; 0 = Half duplex with no telemetry tones
or hang time.
                                        ;     Special Case: Full duplex if
linktolink is set to yes.
                                        ;     This mode is preferred when
interfacing with an external multiport repeater controller.
                                ;     Comment out idrecording and idtalkover to
suppress IDs also
                                        ; 1 = Half duplex with telemetry tones and
hang time. Does not repeat audio.
                                        ;     This mode is preferred when
interfacing a simplex node.
                                        ; 2 = Full Duplex with telemetry tones and
hang time.
                                        ;     This mode is preferred when
interfacing a repeater.
                                        ; 3 = Full Duplex with telemetry tones and
hang time, but no repeated audio.
                                        ; 4 = Full Duplex with telemetry tones and
hang time. Repeated audio only when the autopatch is down.

linktolink = no                     ; disables forcing physical half-duplex
```

```
                 operation of main repeater while
                                 ; still keeping half-duplex semantics (optional)

linkmongain = 0                    ; Link Monitor Gain adjusts the audio level of
monitored nodes when a signal from another node or the local receiver is received.
                                 ; If linkmongain is set to a negative number the
monitored audio will decrease by the set amount in db.
                                 ; If linkmongain set to a positive number monitored
audio will increase by the set amount in db.
                                 ; The value of linkmongain is in db. The default
value is 0 db.

erxgain = -3                       ; Echolink receive gain adjustment
                                 ; Note: Gain is in db-volts (20logVI/VO)
etxgain = 3                  ; Echolink transmit gain adjustment
                                 ; Note: Gain is in db-volts (20logVI/VO)
;eannmode = 1                       ; 1 = Say only node number on echolink
connects (default = 1)
                                        ; 2 = say phonetic call sign only on
echolink connects
                                       ; 3 = say phonetic call sign and node
number on echolink connects

;controlstates = controlstates           ; system control state stanza

scheduler = schedule1331              ; scheduler stanza
functions = functions1331             ; Repeater Function stanza
phone_functions = functions1331       ; Phone Function stanza
link_functions = functions1331        ; Link Function stanza

telemetry = telemetry1331             ; Telemetry stanza
morse = morse1331                ; Morse stanza
wait_times = wait-times1331      ; Wait times stanza

context = radio                  ; dialing context for phone
callerid = "Repeater" <0000000000> ; callerid for phone calls
accountcode = RADIO                  ; account code (optional)

hangtime = 1000                  ; squelch tail hang time (in ms) (optional,
default 5 seconds, 5000 ms)
althangtime = 3000               ; longer squelch tail
totime = 180000                  ; transmit time-out time (in ms) (optional,
default 3 minutes 180000 ms)

idrecording = |i  N4GM/R              ; Main ID message
idtalkover = |i  N4GM/R               ; Talkover ID message
                                 ; See Telemetry section Example: idrecording =
rpt/nodenames/1331
idtime = 540000                      ; id interval time (in ms) (optional) Default 5
minutes (300000 ms)
politeid = 30000             ; time in milliseconds before ID timer expires to try
and ID in the tail. (optional, default 30000)

unlinkedct = ct2             ; Send a this courtesy tone when the user unkeys if
the node is not connected to any other nodes. (optional, default is none)
remotect = ct3                   ; remote linked courtesy tone (indicates a
remote is in the list of links)
linkunkeyct = ct8            ; sent when a transmission received over the link
unkeys
```

```
;nolocallinkct = 0                       ; Send unlinkedct instead if another local node
is connected to this node (hosted on the same PC).

; Supermon smlogger
connpgm=/usr/local/sbin/supermon/smlogger 1
discpgm=/usr/local/sbin/supermon/smlogger 0

;connpgm = yourconnectprogram          ; Disabled. Execute a program you specify on
connect. (default)
                                       ; passes 2 command line arguments to your program:
                                       ; 1. node number in this stanza (us)
                                       ; 2. node number being connected to us (them)
;discpgm = yourdisconnectprogram       ; Disabled. Execute a program you specify on
disconnect. (default)
                                       ; passes 2 command line arguments to your program:
                                       ; 1. node number in this stanza (us)
                                       ; 2. node number being disconnected from us (them)

;lnkactenable = 0                  ; Set to 1 to enable the link activity timer.
Applicable to standard nodes only.

;lnkacttime = 1800                      ; Link activity timer time in seconds.
;lnkactmacro = *52                      ; Function to execute when link activity timer
expires.
;lnkacttimerwarn = 30seconds           ; Message to play when the link activity timer
has 30 seconds left.

;remote_inact_timeout =                ; Specifies the amount of time without keying
from the link. Set to 0 to disable timeout. (15 * 60)
;remote_timeout =                 ; Session time out for remote base. Set to 0 to
disable. (60 * 60)
;remote_timeout_warning_freq =              ; 30
;remote_timeout_warning =            ; (3 * 60)

;nounkeyct = 0                          ; Set to a 1 to eliminate courtesy tones and
associated delays.

holdofftelem = 0              ; Hold off all telemetry when signal is present on
receiver or from connected nodes
                                   ; except when an ID needs to be done and there is a
signal coming from a connected node.

telemdefault = 1                            ; 0 = telemetry output off
                                            ; 1 = telemetry output on (default = 1)
                                            ; 2 = timed telemetry output on command
execution and for a short time thereafter.

telemdynamic = 1                            ; 0 = disallow users to change the local
telemetry setting with a COP command,
                                            ; 1 = Allow users to change the setting
with a COP command. (default = 1)

;beaconing = 0                          ; Send ID regardless of repeater activity
(Required in the UK, but probably illegal in the US)

parrotmode = 0                            ; 0 = Parrot Off (default = 0)
                                   ; 1 = Parrot On Command
                                   ; 2 = Parrot Always
                                   ; 3 = Parrot Once by Command
```

```
parrottime = 1000                ; Set the amount of time in milliseconds
                                 ; to wait before parroting what was received

;rxnotch=1065,40                          ; (Optional) Notch a particular frequency
for a specified
                                         ; b/w. app_rpt must have been compiled with
                                         ; the notch option


startup_macro =

; nodenames = /var/lib/asterisk/sounds/rpt/nodenames.callsign    ; Point to
alternate nodename sound directory

; Stream your node audio to Broadcastify or similar. See
https://wiki.allstarlink.org/wiki/Stream_Node_Audio_to_Broadcastify
; outstreamcmd = /bin/sh,-c,/usr/bin/lame --preset cbr 16 -r -m m -s 8 --bitwidth
16 - - | /usr/bin/ezstream -qvc /etc/ezstream.xml

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;;;;;
; Need more information on these

;extnodes = extnodes-different     ; section in extnodefile containing dynamic
node information (optional)
;extnodefile = /foo/nodes     ; Points to nodelist file containing dynamic node
info default = /var/lib/asterisk/rpt_extnodes (optional)
;extnodefile2 =              ; Is this a list of node files? Possible a list of
private nodes or a list of static IPs for known nodes????
;nodenames = /foo/names          ; locaton of node sound files default =
/var/lib/asterisk/sounds/rpt/nodenames
;archivedir = /tmp              ; defines and enables activity recording into
specified directory (optional)
;monminblocks = 2048            ; Min 1K blocks to be left on partition (will not
save monitor output if disk too full)

;                              ; The tailmessagetime,tailsquashedtime, and
tailmessagelist need to be set
;                              ; to support tail messages. They can be omitted
otherwise.
;tailmessagetime = 300000       ; Play a tail message every 5 mins
;tailsquashedtime = 30000       ; If squashed by another user,
;                              ; try again after 30 seconds
;tailmessagelist = msg1,msg2    ; list of messages to be played for tail message

; alt_functions
; ctgroup
; dphone_functions
; idtime
; iobase
; iospeed
; locallist
; mars            Remote Base
; memory
; nobusyout
; nodes
; nolocallinkct
; notelemtx
; outxlat
```

```
; parrot
; propagate_phonedtmf
; rptnode
; rptinactmacro  Macro to execute when inactivity timer expires
; rptinacttime   Inactivity timer time in seconds  (0 seconds disables feature)
; rxnotch   Optional Audio notch
; simplexphonedelay
; tonemacro
; tonezone
; txlimits


;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;;;;


; *** Status Reporting ***

; Comment the following statpost line stop to reporting of the status of your node
to stats.allstarlink.org
;   statpost_url = http://stats.allstarlink.org/uhandler ; Status updates ***** raa
2/3/22

; ***** End of Node 1331 ****** raa 2/3/22

; ***** Start of Node 1335 ****** raa 2/3/22

[1335]                                 ; Change this to your assigned node number

                                        ; Must also be enabled in modules.conf
                                ; Rx audio/signalling channel. Choose ONLY 1 per node
stanza

                                ; Enable the selected channel driver in
modules.conf !!!
; rxchannel = dahdi/pseudo           ; No radio (hub)
rxchannel = SimpleUSB/usb_1335      ; SimpleUSB
; rxchannel = Pi/1                    ; Raspberry Pi PiTA
; rxchannel = Radio/usb_1335        ; USBRadio (DSP)
; rxchannel = Dahdi/1                ; PCI Quad card
; rxchannel = Beagle/1               ; BeagleBoard
; rxchannel = USRP/127.0.0.1:34001:32001; GNU Radio interface USRP
; rxchannel = Voter/1331             ; RTCM device


duplex = 0                              ; 0 = Half duplex with no telemetry tones
or hang time.
                                        ;     Special Case: Full duplex if
linktolink is set to yes.
                                        ;     This mode is preferred when
interfacing with an external multiport repeater controller.
                                ;     Comment out idrecording and idtalkover to
suppress IDs also
                                        ; 1 = Half duplex with telemetry tones and
hang time. Does not repeat audio.
                                        ;     This mode is preferred when
interfacing a simplex node.
                                        ; 2 = Full Duplex with telemetry tones and
hang time.
```

```
                                            ;        This mode is preferred when
interfacing a repeater.
                                            ; 3 = Full Duplex with telemetry tones and
hang time, but no repeated audio.
                                            ; 4 = Full Duplex with telemetry tones and
hang time. Repeated audio only when the autopatch is down.

linktolink = no                     ; disables forcing physical half-duplex
operation of main repeater while
                                 ; still keeping half-duplex semantics (optional)

linkmongain = 0                     ; Link Monitor Gain adjusts the audio level of
monitored nodes when a signal from another node or the local receiver is received.
                                 ; If linkmongain is set to a negative number the
monitored audio will decrease by the set amount in db.
                                 ; If linkmongain set to a positive number monitored
audio will increase by the set amount in db.
                                 ; The value of linkmongain is in db. The default
value is 0 db.

erxgain = -3                        ; Echolink receive gain adjustment
                                 ; Note: Gain is in db-volts (20logVI/VO)
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                                 ; Note: Gain is in db-volts (20logVI/VO)
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link_functions = functions1331     ; Link Function stanza

telemetry = telemetry1331       ; Telemetry stanza
morse = morse1331               ; Morse stanza
wait_times = wait-times1331     ; Wait times stanza

context = radio                 ; dialing context for phone
callerid = "Repeater" <0000000000> ; callerid for phone calls
accountcode = RADIO                     ; account code (optional)

hangtime = 1000                 ; squelch tail hang time (in ms) (optional,
default 5 seconds, 5000 ms)
althangtime = 3000              ; longer squelch tail
totime = 180000                 ; transmit time-out time (in ms) (optional,
default 3 minutes 180000 ms)

idrecording = |i  N4GM/R        ; Main ID message
idtalkover = |i  N4GM/R         ; Talkover ID message
                                 ; See Telemetry section Example: idrecording =
rpt/nodenames/1331
idtime = 540000                 ; id interval time (in ms) (optional) Default 5
minutes (300000 ms)
politeid = 30000              ; time in milliseconds before ID timer expires to try
```

```
and ID in the tail. (optional, default 30000)

unlinkedct = ct2                  ; Send a this courtesy tone when the user unkeys if
the node is not connected to any other nodes. (optional, default is none)
remotect = ct3                    ; remote linked courtesy tone (indicates a
remote is in the list of links)
linkunkeyct = ct8                 ; sent when a transmission received over the link
unkeys
;nolocallinkct = 0                ; Send unlinkedct instead if another local node
is connected to this node (hosted on the same PC).

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disconnect. (default)
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;lnkactenable = 0                 ; Set to 1 to enable the link activity timer.
Applicable to standard nodes only.

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has 30 seconds left.

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from the link. Set to 0 to disable timeout. (15 * 60)
;remote_timeout =                 ; Session time out for remote base. Set to 0 to
disable. (60 * 60)
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;nounkeyct = 0                         ; Set to a 1 to eliminate courtesy tones and
associated delays.

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receiver or from connected nodes
                                  ; except when an ID needs to be done and there is a
signal coming from a connected node.

telemdefault = 1                           ; 0 = telemetry output off
                                           ; 1 = telemetry output on (default = 1)
                                           ; 2 = timed telemetry output on command
execution and for a short time thereafter.

telemdynamic = 1                           ; 0 = disallow users to change the local
telemetry setting with a COP command,
                                           ; 1 = Allow users to change the setting
with a COP command. (default = 1)
```

```
;beaconing = 0                        ; Send ID regardless of repeater activity
(Required in the UK, but probably illegal in the US)

parrotmode = 0                        ; 0 = Parrot Off (default = 0)
                                      ; 1 = Parrot On Command
                                      ; 2 = Parrot Always
                                      ; 3 = Parrot Once by Command

parrottime = 1000                     ; Set the amount of time in milliseconds
                                      ; to wait before parroting what was received

;rxnotch=1065,40                      ; (Optional) Notch a particular frequency
for a specified
                                      ; b/w. app_rpt must have been compiled with
                                      ; the notch option

startup_macro =

; nodenames = /var/lib/asterisk/sounds/rpt/nodenames.callsign    ; Point to
alternate nodename sound directory

; Stream your node audio to Broadcastify or similar. See
https://wiki.allstarlink.org/wiki/Stream_Node_Audio_to_Broadcastify
; outstreamcmd = /bin/sh,-c,/usr/bin/lame --preset cbr 16 -r -m m -s 8 --bitwidth
16 - - | /usr/bin/ezstream -qvc /etc/ezstream.xml

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info default = /var/lib/asterisk/rpt_extnodes (optional)
;extnodefile2 =                ; Is this a list of node files? Possible a list of
private nodes or a list of static IPs for known nodes????
;nodenames = /foo/names        ; locaton of node sound files default =
/var/lib/asterisk/sounds/rpt/nodenames
;archivedir = /tmp             ; defines and enables activity recording into
specified directory (optional)
;monminblocks = 2048           ; Min 1K blocks to be left on partition (will not
save monitor output if disk too full)

;                             ; The tailmessagetime,tailsquashedtime, and
tailmessagelist need to be set
;                             ; to support tail messages. They can be omitted
otherwise.
;tailmessagetime = 300000      ; Play a tail message every 5 mins
;tailsquashedtime = 30000      ; If squashed by another user,
;                             ; try again after 30 seconds
;tailmessagelist = msg1,msg2   ; list of messages to be played for tail message

; alt_functions
; ctgroup
; dphone_functions
; idtime
; iobase
; iospeed
```

```
; locallist
; mars              Remote Base
; memory
; nobusyout
; nodes
; nolocallinkct
; notelemtx
; outxlat
; parrot
; propagate_phonedtmf
; rptnode
; rptinactmacro  Macro to execute when inactivity timer expires
; rptinacttime   Inactivity timer time in seconds  (0 seconds disables feature)
; rxnotch   Optional Audio notch
; simplexphonedelay
; tonemacro
; tonezone
; txlimits


;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;;;;

; ***** End of Node 1335 ***** raa 2/3/22




[functions]1331

; Prefix    Functions
; *1        Disconnect Link
; *2        Monitor Link
; *3        Connect Link
; *4        Command Mode
; *5        Macros
; *6        User Functions
; *7        Connection Status/Functions
; *8        User Functions
; *9        User Functions
; *0        User Functions

; *A        User Functions
; *B        User Functions
; *C        User Functions
; *D        User Functions


; Mandatory Command Codes
1 = ilink,1      ; Disconnect specified link
2 = ilink,2      ; Connect specified link -- monitor only
3 = ilink,3      ; Connect specified link -- tranceive
4 = ilink,4      ; Enter command mode on specified link
70 = ilink,5          ; System status
99 = cop,6            ; PTT (phone mode only)


; End Mandatory Command Codes
```

```
;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;

; Macro Commands
5 = macro

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;

; Autopatch Commands
; Note, This may be a good place for other 2 digit frequently used commands

61 = autopatchup,noct = 1,farenddisconnect = 1,dialtime = 20000  ; Autopatch up
62 = autopatchdn                                                 ; Autopatch down

; autopatchup can optionally take comma delimited setting=value pairs:

; context = string            ; Override default context with "string"
; dialtime = ms               ; Specify the max number of milliseconds between
phone number digits (1000 milliseconds = 1 second)
; farenddisconnect = 1        ; Automatically disconnect when called party hangs up
; noct = 1               ; Don't send repeater courtesy tone during autopatch calls
; quiet = 1               ; Don't send dial tone, or connect messages. Do not send
patch down message when called party hangs up
                         ; Example:
123=autopatchup,dialtime=20000,noct=1,farenddisconnect=1

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;

; Status Commands

; 1 - Force ID (global)
; 2 - Give Time of Day (global)
; 3 - Give software Version (global)
; 4 - Give GPS location info
; 5 - Last (dtmf) user
; 11 - Force ID (local only)
; 12 - Give Time of Day (local only)

721 = status,1           ; Force ID (global)
722 = status,2           ; Give Time of Day (global)
723 = status,3           ; Give software Version (global)
724 = status,4           ; Give GPS location info
725 = status,5           ; Last (dtmf) user
711 = status,11          ; Force ID (local only)
712 = status,12          ; Give Time of Day (local only)

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;

; Link Commands

; 1 - Disconnect specified link
; 2 - Connect specified link -- monitor only
; 3 - Connect specified link -- tranceive
; 4 - Enter command mode on specified link
; 5 - System status
; 6 - Disconnect all links
; 7 - Last Node to Key Up
; 8 - Connect specified link -- local monitor only
; 9 - Send Text Message (9,<destnodeno or 0 (for all)>,Message Text, etc.
```

```
; 10 - Disconnect all RANGER links (except permalinks)
; 11 - Disconnect a previously permanently connected link
; 12 - Permanently connect specified link -- monitor only
; 13 - Permanently connect specified link -- tranceive
; 15 - Full system status (all nodes)
; 16 - Reconnect links disconnected with "disconnect all links"
; 17 - MDC test (for diag purposes)
; 18 - Permanently Connect specified link -- local monitor only

; ilink commands 1 through 5 are defined in the Mandatory Command section

76 = ilink,6
806 = ilink,6                   ; Disconnect all links
807 = ilink,7                   ; Last Node to Key Up
808 = ilink,8                   ; Connect specified link -- local monitor only
809 = ilink,9,1331,"Testing"  ; would send a text message to node 1331 replace 1331
with 0 for all connected nodes
810 = ilink,10                  ; Disconnect all RANGER links (except permalinks)
811 = ilink,11                  ; Disconnect a previously permanently connected link
812 = ilink,12                  ; Permanently connect specified link -- monitor only
813 = ilink,13                  ; Permanently connect specified link -- tranceive
815 = ilink,15                  ; Full system status (all nodes)
816 = ilink,16                  ; Reconnect links disconnected with "disconnect all
links"
817 = ilink,17                  ; MDC test (for diag purposes)
818 = ilink 18                  ; Permanently Connect specified link -- local monitor
only

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;;;;;;;;;;;;;;;;;

; Control operator (cop) functions.
; Change these to something other than these codes listed below!
; Uncomment as needed.

; 901 = cop,1                    ; System warm boot
; 902 = cop,2                    ; System enable
; 903 = cop,3                    ; System disable

; 904 = cop,4                    ; Test tone on/off (toggle)
; 905 = cop,5                    ; Dump system variables on console (debug use
only)

; 907 = cop,7                    ; Time out timer enable
; 908 = cop,8                    ; Time out timer disable

; 909 = cop,9                    ; Autopatch enable
; 910 = cop,10                   ; Autopatch disable

; 911 = cop,11                   ; User linking functions enable
; 912 = cop,12                   ; User linking functions disable

; 913 = cop,13                   ; Query system control state
; 914 = cop,14                   ; Set system control state

; 915 = cop,15                   ; Scheduler enable
; 916 = cop,16                   ; Scheduler disable

; 917 = cop,17                   ; User functions enable (time, id, etc)
```

```
; 918 = cop,18                          ; User functions disable

; 919 = cop,19                          ; Select alternate hang time (althangtime)
; 920 = cop,20                          ; Select standard hangtime (hangtime)

; 921 = cop,21                          ; Enable Parrot Mode
; 922 = cop,22                          ; Disable Parrot Mode
; 923 = cop,23                          ; Birdbath (Current Parrot Cleanup/Flush)

; 924 = cop,24                          ; Flush all telemetry
; 925 = cop,25                          ; Query last node un-keyed
; 926 = cop,26                          ; Query all nodes keyed/unkeyed
; 927 = cop,27                          ; Reset DAQ minimum on a pin
; 928 = cop,28                          ; Reset DAQ maximum on a pin

; 930 = cop,30                          ; Recall Memory Setting in Attached Xcvr

; 931 = cop,31                          ; Channel Selector for Parallel Programmed Xcvr

; 932 = cop,32                          ; Touchtone pad test: command + Digit string +
# to playback all digits pressed

; 933 = cop,33                          ; Local Telemetry Output Enable
; 934 = cop,34                          ; Local Telemetry Output Disable
; 935 = cop,35                          ; Local Telemetry Output on Demand

; 936 = cop,36                          ; Foreign Link Local Output Path Enable
; 937 = cop,37                          ; Foreign Link Local Output Path Disable
; 938 = cop,38                          ; Foreign Link Local Output Path Follows Local
Telemetry1331
; 939 = cop,39                          ; Foreign Link Local Output Path on Demand

; 942 = cop,42                          ; Echolink announce node # only
; 943 = cop,43                          ; Echolink announce node Callsign only
; 944 = cop,44                          ; Echolink announce node # & Callsign

; 945 = cop,45                          ; Link Activity timer enable
; 945 = cop,46                          ; Link Activity timer disable
; 947 = cop,47                          ; Reset "Link Config Changed" Flag

; 948 = cop,48                          ; Send Page Tone (Tone specs separated by
parenthesis)

; 949 = cop,49                          ; Disable incoming connections (control state
noice)
; 950 = cop,50                          ; Enable incoming connections (control state
noicd)

; 951 = cop,51                          ; Enable sleep mode
; 952 = cop,52                          ; Disable sleep mode
; 953 = cop,53                          ; Wake up from sleep
; 954 = cop,54                          ; Go to sleep
; 955 = cop,55                          ; Parrot Once if parrot mode is disabled

; 956 = cop,56                                  ; Rx CTCSS Enable
; 957 = cop,57                                  ; Rx CTCSS Disable

; 958 = cop.58                                  ; Tx CTCSS On Input only Enable
; 959 = cop,59                                  ; Tx CTCSS On Input only Disable
```

```
; 960 = cop,60                              ; Send MDC-1200 Burst
(cop,60,type,UnitID[,DestID,SubCode])
;                                           ; Type is 'I' for PttID, 'E' for
Emergency, and 'C' for Call
;                                           ; (SelCall or Alert), or 'SX' for STS
(ststus), where X is 0-F.
;                                           ; DestID and subcode are only specified
for  the 'C' type message.
;                                           ; UnitID is the local systems UnitID.
DestID is the MDC1200 ID of
;                                           ; the radio being called, and the
subcodes are as follows:
;                                           ; Subcode '8205' is Voice Selective Call
for Spectra ('Call')
;                                           ; Subcode '8015' is Voice Selective Call
for Maxtrac ('SC') or
;                                           ; Astro-Saber('Call')
;                                           ; Subcode '810D' is Call Alert (like
Maxtrac 'CA')

; 961 = cop,61                              ; Send Message to USB to control GPIO
pins (cop,61,GPIO1=0[,GPIO4=1].....)
; 962 = cop,62                              ; Send Message to USB to control GPIO
pins, quietly (cop,62,GPIO1=0[,GPIO4=1].....)

; 963 = cop,63                              ; Send pre-configred APRSTT notification
(cop,63,CALL[,OVERLAYCHR])
; 964 = cop,64                              ; Send pre-configred APRSTT notification,
quietly (cop,64,CALL[,OVERLAYCHR])
; 965 = cop,65                              ; Send POCSAG page (equipped channel
types only)

[functions-remote]

0 = remote,1                                ; Retrieve Memory
1 = remote,2                                ; Set freq.
2 = remote,3                                ; Set tx PL tone
3 = remote,4                                ; Set rx PL tone
40 = remote,100                             ; Rx PL off
41 = remote,101                             ; Rx PL on
42 = remote,102                             ; Tx PL off
43 = remote,103                             ; Tx PL on
44 = remote,104                             ; Low Power
45 = remote,105                             ; Medium Power
46 = remote,106                             ; High Power
711 = remote,107                            ; Bump -20
714 = remote,108                            ; Bump -100
717 = remote,109                            ; Bump -500
713 = remote,110                            ; Bump +20
716 = remote,111                            ; Bump +100
719 = remote,112                            ; Bump +500
721 = remote,113                            ; Scan - slow
724 = remote,114                            ; Scan - quick
727 = remote,115                            ; Scan - fast
723 = remote,116                            ; Scan + slow
726 = remote,117                            ; Scan + quick
729 = remote,118                            ; Scan + fast
79 = remote,119                             ; Tune
```

```
51 = remote,5                              ; Long status query
52 = remote,140                     ; Short status query
67 = remote,210                     ; Send a *
69 = remote,211                     ; Send a #
;91 = remote,99,CALLSIGN,LICENSETAG      ; Remote base login.
                                         ; Define a different dtmf sequence for each
user which is
                                         ; authorized to use the remote base to
control access to it.
                                         ; For example 9139583=remote,99,WB6NIL,G
would grant access to
                                         ; the remote base and announce WB6NIL as
being logged in.
                                         ; Another entry, 9148351=remote,99,WA6ZFT,E
would grant access to
                                         ; the remote base and announce WA6ZFT as
being logged in.
                                         ; When the remote base is disconnected from
the originating node, the
                                         ; user will be logged out. The LICENSETAG
argument is used to enforce
                              ; tx frequency limits. See [txlimits] below.
85 = cop,6                            ; Remote base telephone key


[telemetry]1331

; Telemetry entries can be shared across all repeaters, or defined for each
repeater.
; Can be a tone sequence, morse string, or a file
;
; |t - Tone escape sequence
;
; Tone sequences consist of 1 or more 4-tuple entries (freq1, freq2, duration,
amplitude)
; Single frequencies are created by setting freq1 or freq2 to zero.
;
; |m - Morse escape sequence
;
; Sends Morse code at the telemetry amplitude and telemetry frequency as defined in
the
; [morse] section.
;
; Follow with an alphanumeric string
;
; |i - Morse ID escape sequence
;
; Sends Morse code at the ID amplitude and ID frequency as defined in the
; [morse] section.
;
; path/to/sound/file/without/extension
;
; Send the sound if in place of a constructed tone. Do not include the file
extension
; Example: ct8 = rpt/bloop
; Example: idrecording = rpt/nodenames/1331

ct1 = |t(350,0,100,2048)(500,0,100,2048)(660,0,100,2048)
ct2 = |t(660,880,150,2048)
```

```
ct3 = |t(440,0,150,4096)
ct4 = |t(550,0,150,2048)
ct5 = |t(660,0,150,2048)
ct6 = |t(880,0,150,2048)
ct7 = |t(660,440,150,2048)
ct8 = |t(700,1100,150,2048)
ranger = |t(1800,0,60,3072)(0,0,50,0)(1800,0,60,3072)(0,0,50,0)(1800,0,60,3072)
(0,0,50,0)(1800,0,60,3072)(0,0,50,0)(1800,0,60,3072)(0,0,50,0)(1800,0,60,3072)
(0,0,150,0)
remotemon = |t(1209,0,50,2048)                              ; local courtesy
tone when receive only
remotetx = |t(1633,0,50,3000)(0,0,80,0)(1209,0,50,3000)      ; local courtesy
tone when linked Trancieve mode
cmdmode = |t(900,903,200,2048)
functcomplete = |t(1000,0,100,2048)(0,0,100,0)(1000,0,100,2048)
remcomplete = |t(650,0,100,2048)(0,0,100,0)(650,0,100,2048)(0,0,100,0)
(650,0,100,2048)
pfxtone = |t(350,440,30000,3072)
patchup = rpt/callproceeding
patchdown = rpt/callterminated

; As far as what the numbers mean,
; (000,000,010,000)
;   |   |   |   |-------amplitude
;   |   |   |------------duration
;   |   |------------------Tone 2
;   |------------------------Tone 1

; So, with 0,0,10,0 That says No Tone1, No Tone2, 10ms duration, 0 Amplitude.
; Use it for a delay.  Fine tuning for how long before telemetry is sent, in
conjunction with the telemdelay parameter)
; The numbers, like 350,440,10,2048 are 350Hz, 440Hz, 10ms delay, amplitude of
2048.

; Morse code parameters, these are common to all repeaters.

[morse]1331
speed = 20                     ; Approximate speed in WPM
frequency = 800                       ; Morse Telemetry Frequency
amplitude = 4096                ; Morse Telemetry Amplitude
idfrequency = 1065                    ; Morse ID Frequency
idamplitude = 1024                    ; Morse ID Amplitude

;
; This section allows wait times for telemetry events to be adjusted
; A section for wait times can be defined for every repeater
;

[wait-times]1331
telemwait = 2000                         ; Time to wait before sending most
telemetry
idwait = 500                             ; Time to wait before starting ID
unkeywait = 2000                         ; Time to wait after unkey before sending
CT's and link telemetry
calltermwait = 2000                      ; Time to wait before announcing "call
terminated"

; Memories for remote bases
```

```
[memory]
;00 = 146.580,100.0,m
;01 = 147.030,103.5,m+t
;02 = 147.240,103.5,m+t
;03 = 147.765,79.7,m-t
;04 = 146.460,100.0,m
;05 = 146.550,100.0,m

; Place command macros here

[macro]
;1 = *32011#
;2 = *12001*12011*12043*12040*12050*12060*12009*12002*12003*12004*1113*12030#
;3 = *32001*32011*32050*32030*32060#


; Data Acquisition configuration

;[daq-list]
;device = device_name1
;device = device_name2

;Where: device_name1 and device_name2 are stanzas you define in this file

;device = daq-cham-1

; Device name

;[daq-cham-1]                      ; Defined in [daq-list]
;hwtype = uchameleon              ; DAQ hardware type
;devnode = /dev/ttyUSB0           ; DAQ device node (if required)
;1 = inadc                  ; Pin definition for an ADC channel
;2 = inadc
;3 = inadc
;4 = inadc
;5 = inadc
;6 = inadc
;7 = inadc
;8 = inadc
;9 = inp                    ; Pin definition for an input with a weak pullup
resistor
;10 = inp
;11 = inp
;12 = inp
;13 = in                    ; Pin definition for an input without a weak pullup
resistor
;14 = out                   ; Pin definition for an output
;15 = out
;16 = out
;17 = out
;18 = out

;[meter-faces]

;face = scale(scalepre,scalediv,scalepost),word/?,...
;
; scalepre = offset to add before dividing with scalediv
; scalediv = full scale/number of whole units (e.g. 256/20 or 12.8 for 20 volts).
; scalepost = offset to add after dividing with scalediv
```

```
;
;face = range(X-Y:word,X2-Y2:word,...),word/?,...
;face = bit(low-word,high-word),word/?,...
;
; word/? is either a word in /var/lib/asterisk/sounds or one of its subdirectories,
; or a question mark which is  a placeholder for the measured value.
;
;
; Battery voltage 0-20 volts
;batvolts = scale(0,12.8,0),rpt/thevoltageis,?,ha/volts
; 4 quadrant wind direction
;winddir = range(0-33:north,34-96:west,97-160:south,161-224:east,225-
255:north),rpt/thewindis,?
; LM34 temperature sensor with 130 deg. F full scale
;lm34f = scale(0,1.969,0),rpt/thetemperatureis,?,degrees,fahrenheit
; Status poll (non alarmed)
;light = bit(ha/off,ha/on),ha/light,?

;[alarms]
;
;tag = device,pin,node,ignorefirst,func-low,func-hi
;
;tag = a unique name for the alarm
;device = daq device to poll
;pin = the device pin to be monitored
;ignorefirstalarm = set to 1 to throwaway first alarm event, or 0 to report it
;node = the node number to execute the function on
;func-low = the DTMF function to execute on a high to low transition
;func-high = the DTMF function to execute on a low to high transition
;
; a  '-' as a function name is shorthand for no-operation
;
;door = daq-cham-1,9,1,2017,*7,-
;pwrfail = daq-cham-1,10,0,2017,*911111,-
;
; Control states
; Allow several control operator functions to be changed at once using one command
(good for scheduling)
;
;[controlstates]
;statenum = copcmd,[copcmd]...
;0 = rptena,lnkena,apena,totena,ufena,noicd  ; Normal operation
;1 = rptena,lnkena,apdis,totdis,ufena,noice  ; Net and news operation
;2 = rptena,lnkdis,apdis,totena,ufdis,noice  ; Repeater only operation

; Scheduler - execute a macro at a given time

[schedule]1331
;dtmf_function =  m h dom mon dow  ; ala cron, star is implied
;2 = 00 00 * * *   ; at midnight, execute macro 2.

; See https://wiki.allstarlink.org/wiki/Event_Management
[events]

#includeifexists custom/rpt.conf
```