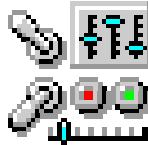**ScanControl Version 7.1.x**

SC230, BC246T, BR330T, BCD396T, BCT15, BCD996T
Users Guide

One Program, Multiple Scanners, Made in USA

ScanControl
One Program, Multiple Scanners, Made in USA

ScanControl User's Guide Version 7.1.x – 03/2009
SC230, BC246T, BR330T, BCD396T, BCT15, BCD996T

Introduction

Table of Contents

Software Overview

ScanControl has been developed to provide sophisticated scanning radio monitoring, control and automation. It currently supports the Uniden BC95XLT, BC245XLT, BC895XLT, BC898T, BCT8, BC780XLT, BC250D, BC296D, BC785D, BC796D, SC230, BC246T, BR330T, BCD396T, BCT15, BCD996T, PSR-500, PSR-600 and the Radio Shack PRO2052, PRO-106 and PRO197. Visit our Web Site at http://www.scannersoft.com for the latest product details and software version information.

Software Architecture

The software has been developed to provide two basic types of functionality:

1. Scanner Memory Management (SMM)
   Scanner Memory Management (SMM) solves the problem of having to manually enter frequencies and Talkgroup IDs into the radio but it goes far beyond this convenience. SMM provides functionality for programming frequencies, Channel tags, control attributes (Priority, Delay, Lockout, Attenuate, Trunked), Talkgroup IDs and Talkgroup Tags into your Personal Computer (PC), saving them to your PCs hard disk, recalling them from your PCs hard disk, programming them into your scanner and printing them. The program supports creating, saving, recalling programming and uploading (from the scanner) an unlimited number of scanner data files. Each file is an exact copy of the scanner's memory structure with the addition of Bank, Channel and Talkgroup ID tags (alphanumeric descriptors) so you can easily identify the Bank, Channel and Talkgroup IDs. This feature makes it very convenient to create and store multiple scanner data files organized any way you want that can then be programmed into the scanner in minutes. In addition to programming or uploading the entire radio in one step SMM also allows you to program or upload individual Systems on demand.

2. Scanner Monitoring and Control (SMC)
   Scanner Monitoring and Control (SMC) provides direct radio monitoring and control simulating the radio keypad operation on your PC. It also provides a Scan and Search Hit List capability with Hit tagging and Hit exportation directly into .CSV (Excel) format.

Minimum System Requirements

- Personal Computer (i486 or higher) running Microsoft Windows ME, NT, 2000, XP, Vista or higher
- Minimum Monitor Screen Resolution of 800 X 600 (w/Small Fonts) (1024 X 768 Recommended)
- BASIC Edition - Uniden BC95XLT or SC230
- RACE Edition - Uniden SC230 or BR330
- FULL Uniden Edition - Uniden BCT8, BC95XLT, BC245XLT, BC895XLT, BC898T, BCT8, BC780XLT, BC250D, BC296D, BC785D, BC796D, SC230, BC246T, BR330T, BCD396T, BCT15, BCD996T or Radio Shack PRO2052 Scanner
- FULL GRE Edition - GRE Manufactured Radio: PSR-500, PSR-600, Radio Shack PRO-106, PRO-197
- PRO Edition - Uniden BCT8, BC95XLT, BC245XLT, BC895XLT, BC898T, BCT8, BC780XLT, BC250D, BC296D, BC785D, BC796D, SC230, BC246T, BR330T, BCD396T,

BCT15, BCD996T, Radio Shack PRO2052 AND GRE Manufactured PSR-500, PSR-600, Radio Shack PRO-106, PRO-197

- Intelligent Audio Capture (IAC) requires a PC Sound Card with available audio input jack and an audio cable to connect the scanner audio output to the sound card input. Cable type will vary with specific sound card jack requirements.
- Scanner to PC Serial Port Cable (USB Interface is not supported in these radios, but USB to serial port converters are available – see our Web Site at http://www.scannersoft.com)
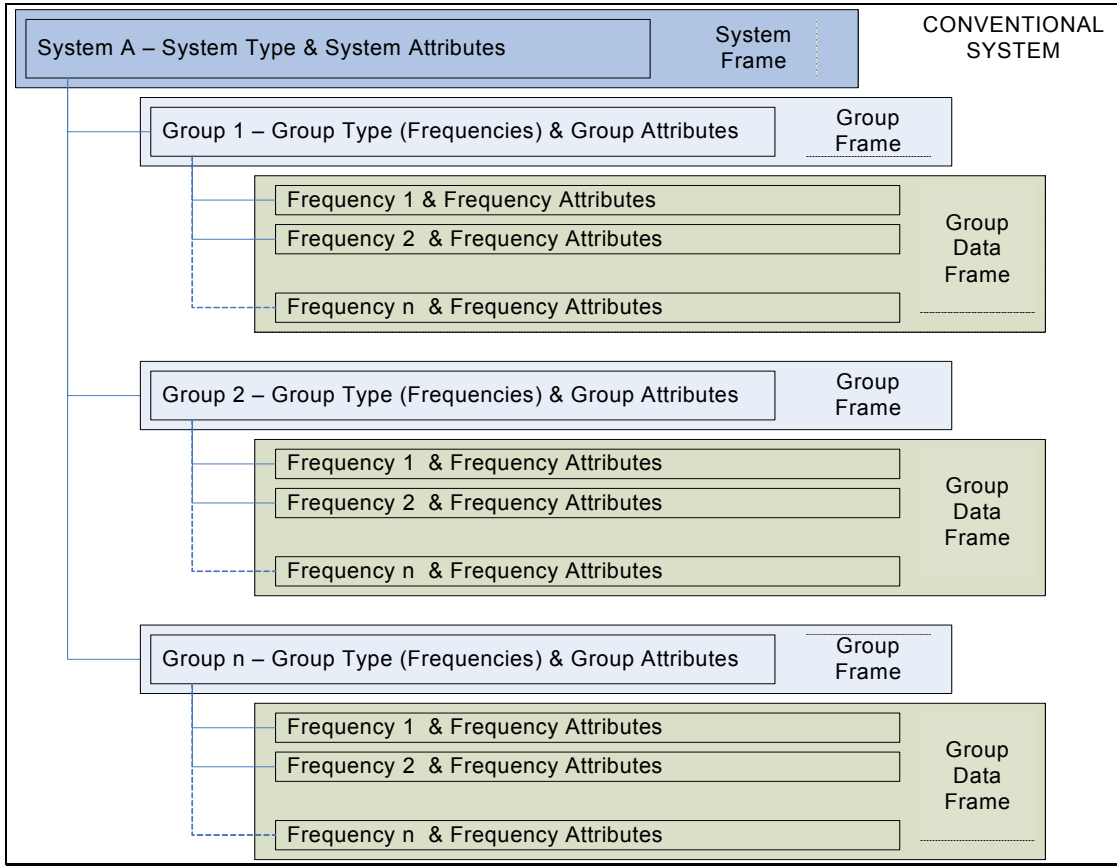- Available Serial Port on PC (COM1 through COM15)

The Basics

In order for the user to get the most out of ScanControl an explanation of the terminology used throughout the program and this guide would be helpful and would provide the best general understanding of the program's features and functionality.

- **Scanner's Radio Memory** – Non-volatile storage of Channel frequencies, control attributes and Talkgroup IDs (trunked Banks) in the scanner.
- **Dynamic Memory Architecture (DMA)** – The newer scanners from Uniden, e.g. the BC246T and the BCD396T employ a new memory technology known as Dynamic Memory Architecture, or DMA. DMA allows for more efficient and flexible use of scanner memory by not imposing fixed sizes for banks or scanlists. The radio can be configured to have multiple "Systems" containing multiple "Groups". A Group can contain conventional frequencies or Talkgroup IDs in a trunked system. The size of a System and the Groups within it are only limited by the amount of available memory in the radio. The diagrams below depict how Systems relate to Groups, and how Groups contain frequencies or Talkgroup IDs, and how they are organized for use. ScanControl has been designed to replicate this organization as part of the data entry and edit process. You'll see later in this manual how the Systems edit screen is organized to have a System Frame, a Group Frame and a Group Data Frame for data entry and editing. Conventional Systems contain only Groups of frequencies. Trunked systems contain one Group of frequencies and multiple Groups of Talkgroup IDs arranged in any logical order you want. The BCD996T adds the concept of a Trunk system site. A site is group of frequencies, or channels, used by a particular geographic location in a Trunk system. A Trunk system can have many sites, each containing a set of frequencies associated with that geographic site location.
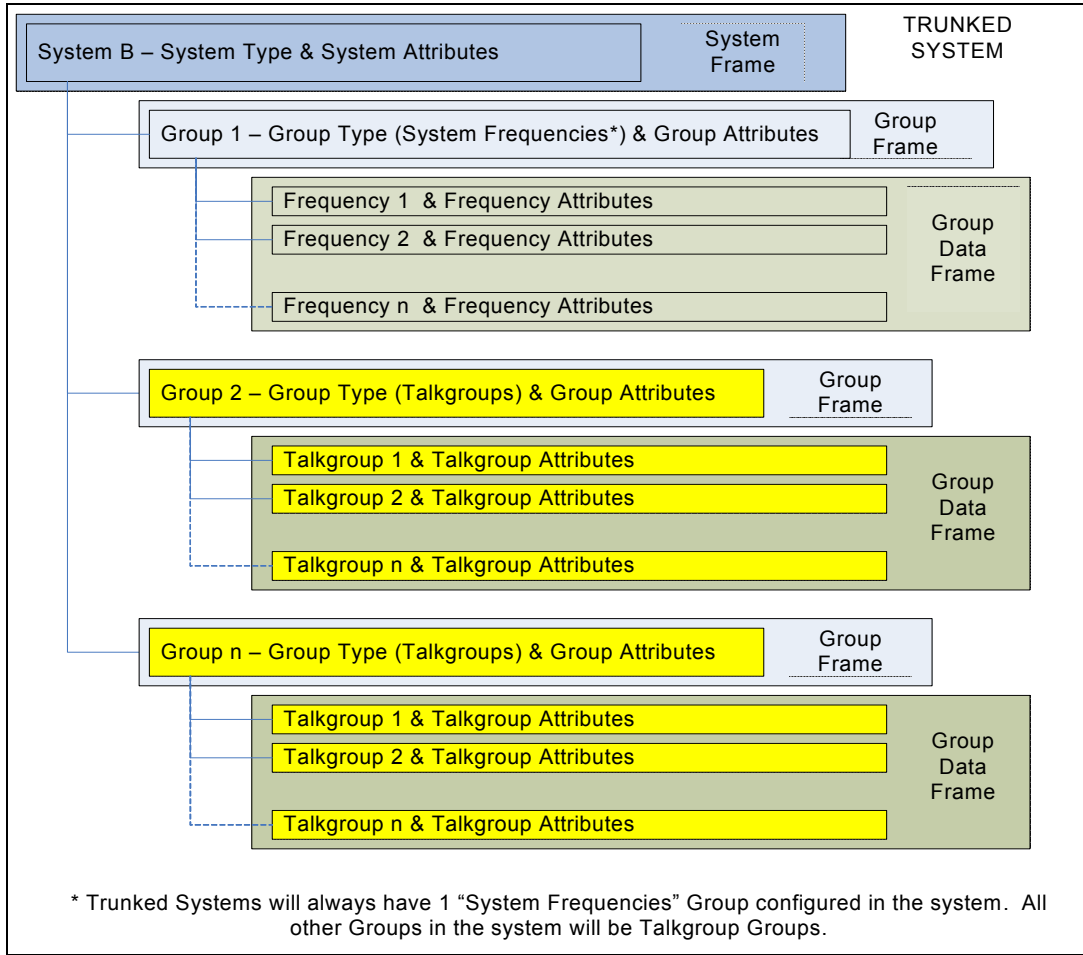
		CONVENTIONAL SYSTEM
System A – System Type & System Attributes	System Frame	

Group 1 – Group Type (Frequencies) & Group Attributes — Group Frame

Frequency 1 & Frequency Attributes
Frequency 2 & Frequency Attributes
Frequency n & Frequency Attributes
Group Data Frame

Group 2 – Group Type (Frequencies) & Group Attributes — Group Frame

Frequency 1 & Frequency Attributes
Frequency 2 & Frequency Attributes
Frequency n & Frequency Attributes
Group Data Frame

Group n – Group Type (Frequencies) & Group Attributes — Group Frame

Frequency 1 & Frequency Attributes
Frequency 2 & Frequency Attributes
Frequency n & Frequency Attributes
Group Data Frame

Figure 1 - DMA Organization - Conventional Systems

Figure 2 - DMA Organization - Trunked Systems BC246T, BR330T, BCD396T
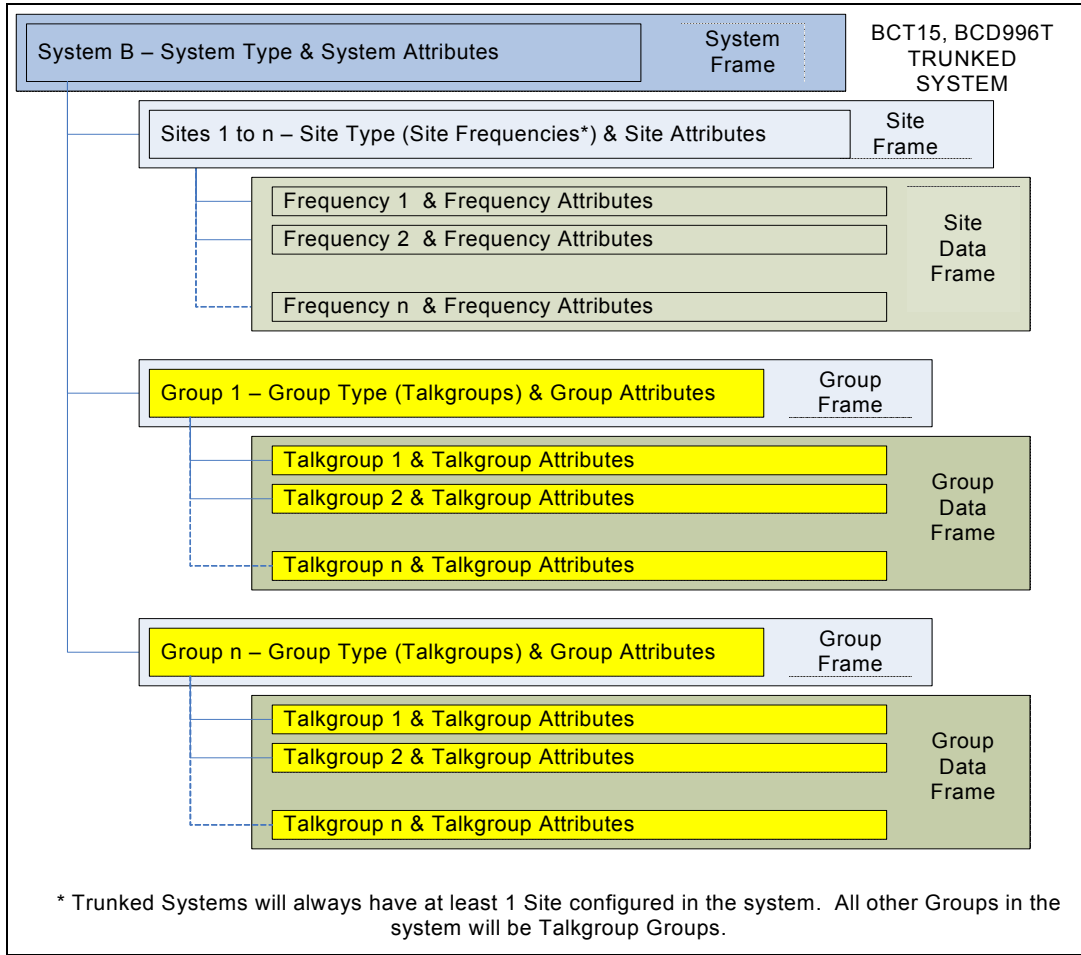
Figure 3 - DMA Organization - Trunked Systems BCT15, BCD996T

- **Non DMA Radios** – Radios that do not employ Dynamic Memory Architecture. These are the BC95XLT, BC245XLT, BC895XLT, BC898T, BCT8, BC780XLT, BC250D, BC785D, BC296D, BC796D and the PRO2052.
- **DMA Radios** – Radios that employ Dynamic Memory Architecture. These are the SC230, BC246T, BR330T, BCD396T, BCT15 and the BCD996T.
- **GRE Radios** – Radios manufactured by GRE and sold as the GRE PSR-500, PSR-600, Radio Shack PRO-106, PRO-107.
- **ScanControl Memory Area** – The active PC memory area (RAM) being used by ScanControl. The user interacts with this memory area when entering frequencies, alphanumeric tags, Fleet Maps and Talkgroup IDs into the ScanControl program.
- **ScanControl Data File** – A PC data file on hard disk containing a complete set of radio memory information plus alphanumeric tags for Bank names, Channel information and Talkgroup information.
- **Program Radio** – Copy ScanControl Memory Area information into the scanner's radio memory.
- **Upload or Load Memory** – Copy the scanner's radio memory information into the ScanControl Memory Area.

- **Control Channel** – An active data Channel frequency programmed into one of the available Channels in a Trunked Bank.
- **Alphanumeric Tags** – Bank, Channel and Talkgroup ID information stored in the ScanControl Data File. The BCT8, BC95XLT, BC245XLT, BC895XLT, BC898T and PRO2052 scanners do not have memory space for these alphanumeric tags so they are not stored in the radio. The BC780XLT, BC250D, BC296D, BC785D, BC796D, SC230, BC246T, BR330T, BCT396T, BCT15 and BCD996T <u>do</u> have memory space for these tags therefore they are stored in the radio.
- **Banks, Channels, Talkgroups, ScanLists, FleetMaps** – In Non-DMA radios, the organization of the scanner's radio memory. See the table below for the memory organization for each scanner ScanControl supports.

Radio	Banks	Channels Per Bank	Total	ScanLists Per Bank	Total	ScanList Locations Per ScanList	Per Bank	Total	FleetMaps Per Bank	Search Ranges
BC95XLT	10	20	200	0	0	0	0	0	0	10
BC245XLT	10	30	300	10	100	10	100	1000	8	1
BC895XLT	10	30	300	5	50	10	50	500	8	1
PRO2052	20	50	1000	5	100	10	50	1000	8	1
BC780XLT	10	50	500	10	100	10	100	1000	8	10
BC250D	10	100	1000	10	100	10	100	1000	8	10
BC785D	10	100	1000	10	100	10	100	1000	8	10
BC296D	10	100	1000	10	100	10	100	1000	8	10
BC796D	10	100	1000	10	100	10	100	1000	8	10
BC898T	10	50	500	10	100	10	100	1000	8	10
BCT8	5	50	250	5	25	10	50	250	8	**
SC230	Radio Memory is allocated from a "pool" in units of Systems and Groups. Systems contain Groups. Groups contain Conventional Channels.									
BC246T / BR330T / BCD396T	Radio Memory is allocated from a "pool" in units of Systems and Groups. Systems contain Groups. Groups contain Trunk Channels, Conventional Channels or Talkgroup IDs.									
BCT15 / BCD996T	Radio Memory is allocated from a "pool" in units of Systems, Sites and Groups. Systems contain Sites and Groups. Sites contain Trunk Channels. Groups contain Conventional Channels or Talkgroup IDs.									

Figure 4 - Radio Memory Configurations

Logging – ScanControl has detailed function logging. This feature can be turned on or off from the Main Control Screen. When active each program action is time stamped and logged into a file (**<drive>:\<install directory path>\Scanctrl.log**) for history and audit purposes. The log file has a size maximum of 100KB. When the log reaches 100KB the program automatically archives it into a time stamped file (**e.g. scanctrl071602143220.log**) and creates a new, empty log file.

Intelligent Audio Capture (IAC) – During Control / Monitoring sessions ScanControl can capture and record the audio from the scanner. The audio is recorded to your PCs hard drive in digitized audio files located in a folder in the ScanControl installation directory. This folder name would be **<drive>:\<install directory path>\audio_capture**). The audio files would then be separated into separate files & folders depending on the IAC grouping chosen on the ScanControl Program Options screen.

Getting Started
1. Connect scanner to an available PC serial port via the cable supplied by the scanner manufacturer.
2. Turn scanner power on.
3. Put scanner in PC communications mode. See your radio's Users Guide for detailed instructions or visit our Radio Setup Web Page at http://www.scannersoft.com/radio_setup.htm .
4. Start the ScanControl software by clicking on START, PROGRAMS, SCANCONTROL from the Start Menu or by selecting **<drive>:\<install directory path>\Scanctrl.exe** from within Windows Explorer.
5. When ScanControl starts it attempts to connect to the scanner automatically by searching all available COM ports and displays the screen below:

Figure 5 - Radio Search Screen

It detects the Baud Rate and COM port in use by the radio automatically. If for some reason ScanControl cannot connect to your radio automatically you will get an error message. Check your radio, cable, etc. again. If you get this message you have 3 options: 1) Abort – Exit the program. 2) Retry – Attempt to connect to the radio again. 3) Ignore – Proceed through the error message and go to the Main Control Screen. Once the correct COM port and speed are detected and communications with the radio is established these settings will be saved and used by ScanControl every time it is run in the future until the radio is reconfigured. Once radio communication is established the first time you may get a warning message saying "Data File Not Forward Compatible … ". This is normal if you are not connecting a BC245XLT scanner to ScanControl. As a default ScanControl expects a BC245XLT radio. Click on OK to continue through the message. ScanControl then remembers the radio now connected and establishes it as your default.

Main Control Screen

The Main Control Screen is the first screen presented to the user once all the program initiation steps have completed. It provides all feature / function selection and program status information to the user. It contains several sections organized by function as described below:
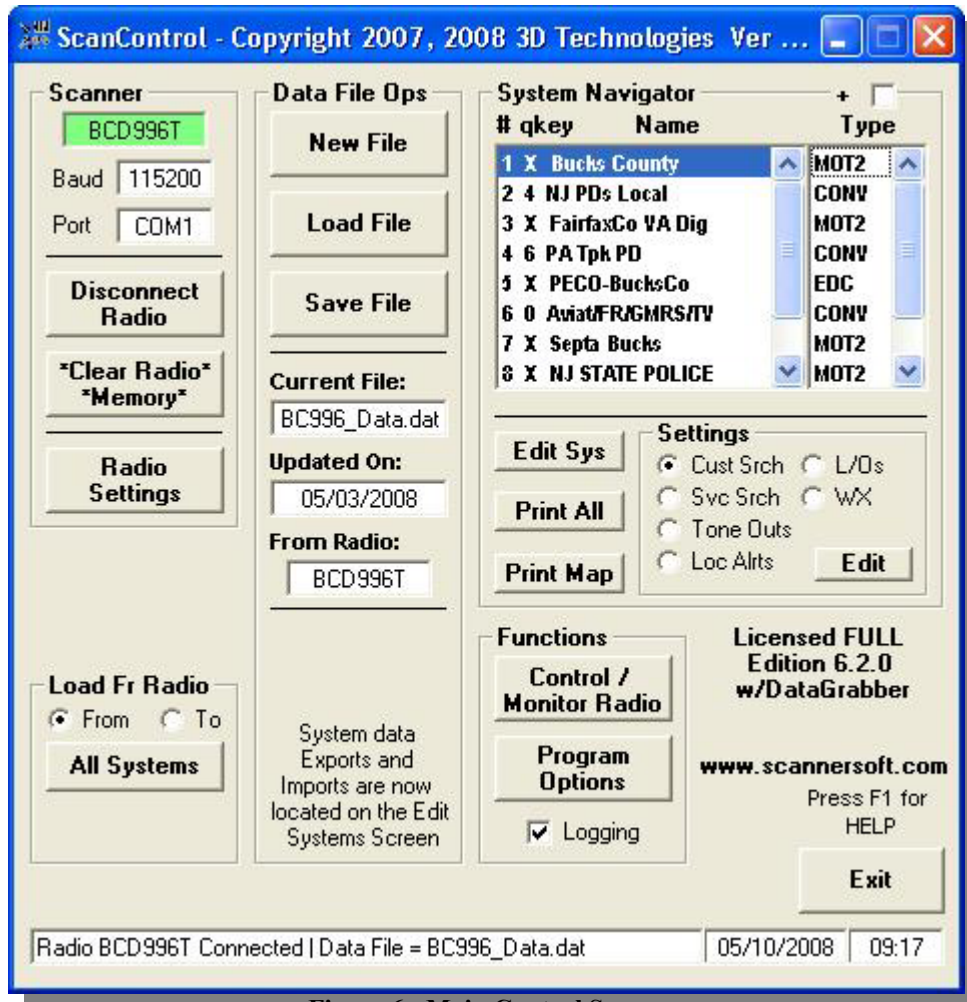
Figure 6 - Main Control Screen

- **Scanner Section** – Displays radio communications status information, communications options settings and performs basic radio control.
  - o **Radio Status Window** – RED = No radio connected, GREEN = Radio connected and type displayed.
  - o **Communications Speed (Baud)** – ScanControl automatically detects the baud rate set in your radio during initialization and sets this value accordingly. This value is then stored in your configuration session file for future use. If you change the baud rate in your radio ScanControl will automatically re-configure itself the next time you start the program or the next time you click on the "Connect Radio" button. ScanControl supports a maximum baud rate of 115,200.
  - o **Communications Port (Port)** – ScanControl automatically detects the COM Port your radio is connected to during initialization (provided the radio is powered ON and in remote mode) and sets this value accordingly. This value is then stored in your

configuration session file for future use. If you change the port your radio is connected to ScanControl will automatically re-configure itself the next time you start the program or the next time you click on the "Connect Radio" button. Ports COM1 through COM9 are supported.

- o **Connect / Disconnect Radio Button** – Click to attempt to connect to radio after communications settings in radio are changed or when radio is switched to a different type. Click to disconnect radio to change radios without having to exit and restart ScanControl. Facilitates switching radios in mid session or disconnecting current radio in order to operate on data files from different radio types.
- o ***Clear Radio Memory Button*** – Click to erase radio memory. ***WARNING! This function will completely erase all Channel and Talkgroup information in the radio. This function should be used with caution and only when you want to wipe the radio clean.*** This button is disabled if no radio is connected.
- o **Radio Settings Button -** Click to open the Radio Settings Screen (See Below). This screen is used to set global functions in the radio such as display backlighting, screen contrast, etc. When the screen opens the settings are immediately read from the radio and displayed. When the user changes a setting it is immediately sent to the radio.
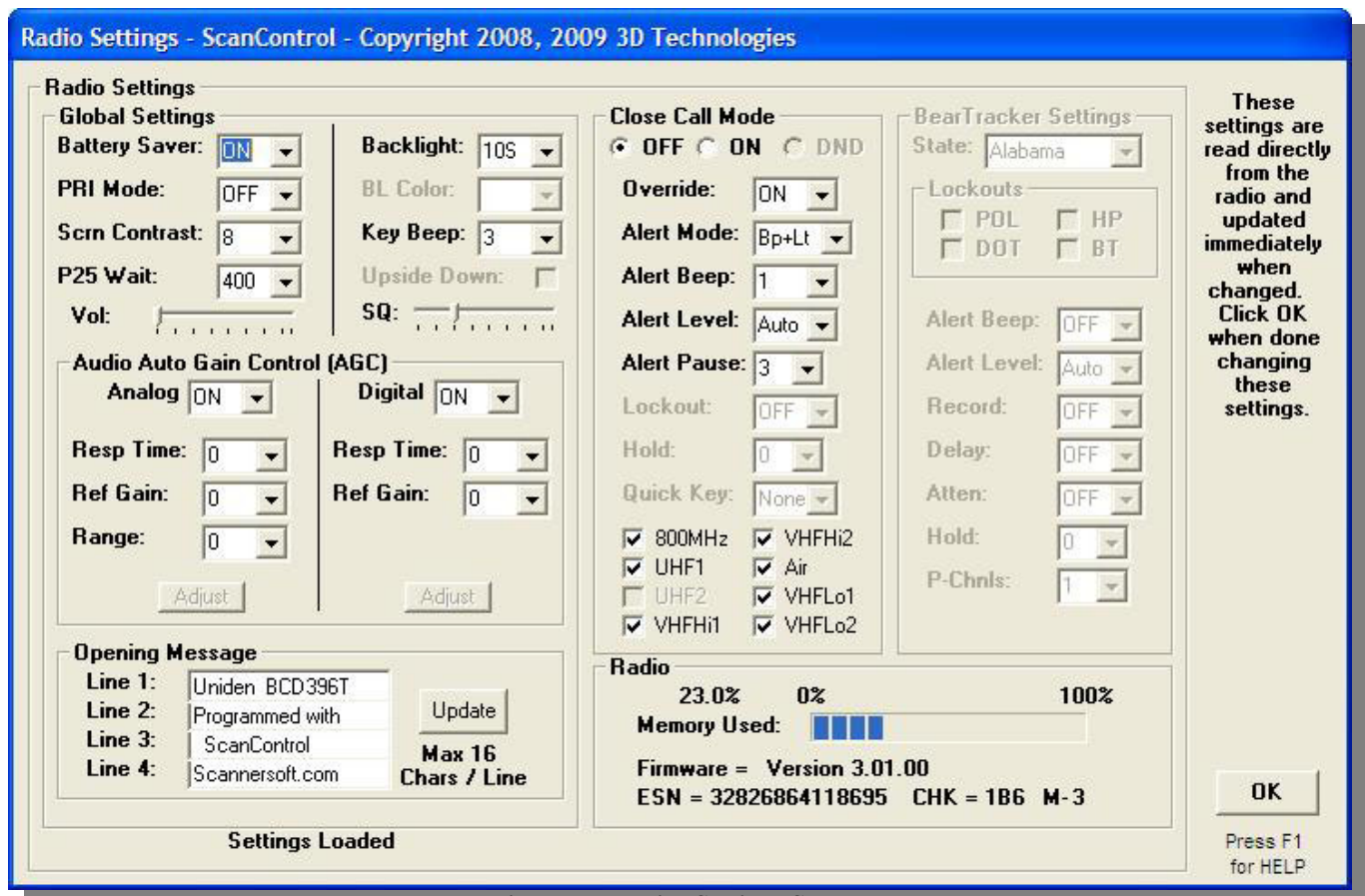
Radio Settings Screen

Figure 7 - Radios Settings Screen

o **Backlight** – Drop down list box to select the LCD backlight operation mode.
o **Key Beep** – Drop down list box to select the Key Beep mode.
o **Battery Saver** – Drop down list box to select the Battery Saver mode.
o **BL Color** – Backlight color setting. (BCD996T Only)
o **PRI Mode** – Selects Priority Mode ON or OFF.
o **Scrn Contrast** – Drop down list box to select the Screen Contrast level. (BR330T, BR330T, BCT396T, BCT15, BCD996T Only)
o **Upside Down** – Inverts the display for inverted mounting of the BCT15 and BCD996T. (BCT15 and BCD996T Only)
o **Audio AGC** – Drop down list boxes to enable or disable Audio Automatic Gain Control (AGC) for both Analog audio and Digital audio. (BR330T, BCT396T, BCT15, BCD996T Only)
  ▪ **REF GAIN Adjustment** – Setting for AGC Reference Level (Analog and Digital). Adjust if Digital and Analog Audio Levels Are Not Equal.
  ▪ **RES TIME Adjustment** – Setting for AGC Factor Update Frequency (Analog and Digital). Decreasing Makes AGC Respond Faster.
  ▪ **GN RANGE Adjustment** – Setting for Dynamic Range of AGC Adjustments (Analog Only). Larger Value Allows Wider Volume Variation.
  ▪ **AGC Analog / Digital Adjust Buttons** – Buttons to open the AGC Adjustment Screen (Pre Ver 3.x Firmware - See Below). To perform Analog AGC adjustments the radio must have <u>only</u> Analog AGC enabled. To perform Digital AGC adjustments the radio must have Digital AGC enabled. (BR330T, BCT396T, BCT15, BCD996T Only)
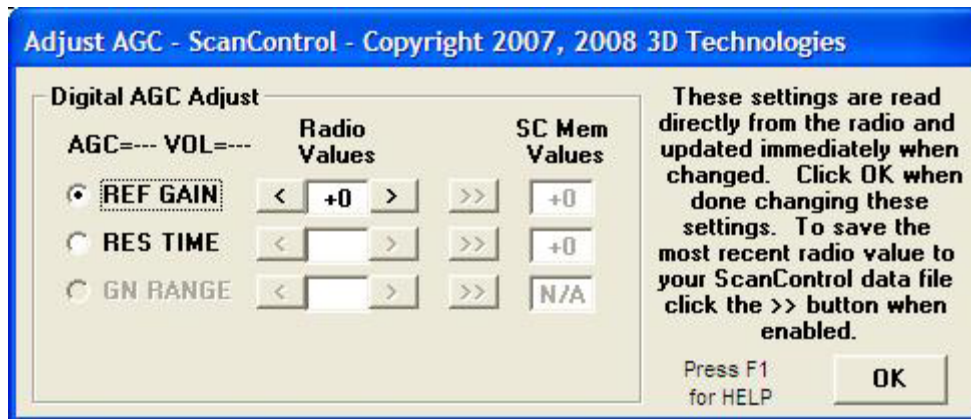

Figure 8 – AGC Adjustment Screen – Pre V3.x Firmware

  ▪ **>> Copy to SC Mem** – Copies the value currently in the radio to the ScanControl data file (.dat) for storage and future retrieval.

o **Vol Slide Control** – Adjusts radio Volume level. (BR330T, BCT396T, BCT15, BCD996T Only)
o **SQ Slide Control** – Adjusts radio Squelch level. (BR330T, BCT396T, BCT15, BCD996T Only)
o **Opening Message** – Up to 4 lines of text displayed on the radio screen when the radio is turned on. Maximum of 16 characters per line permitted.

- o **Memory Used** – Fuel gauge indicating the amount of radio memory in use by all stored systems.
- o **Close Call Mode Section** – Controls to set Close Call Mode parameters in the radio and then turn Close Call Mode ON or OFF. See your radio Owner's Manual for details on each of these settings and what they mean.
- o **BearTracker Settings** – Controls to select / set options for BearTracker Mode in scanner models that support this feature. See your radio Owner's Manual for details on each of these settings and what they mean. (BCT15 Only).
- o **Firmware Version** – The current radio Firmware version as read directly from the radio.
- o **ESN Info** – The current radio Electronic Serial Number (ESN) and Checksum information if available.
- o **OK Button** – Button to close the Radio Settings screen.

- **Data File Ops Section** – Manages ScanControl Data File Operations.
  - o **New File Button** – Click to create a new, empty ScanControl Data File. If there is no radio connected (see Connect / Disconnect button use above) then the radio selection screen, shown below, will be displayed allowing the user to select which radio type the new file will be configured for. You will be given the option to clear the ScanControl Memory Area. If you select NO the action will be aborted and the new file will not be created. If you select YES the ScanControl Memory Area will be cleared and a new empty file will be created and saved under the name you enter. You will then be given the option to clear the radio memory. *WARNING! Selecting YES here will completely erase all Channel and Talkgroup information in the radio. This function should be used with caution and only when you want to wipe the radio clean.*

Figure 9 - Radio Selection Screen

  - o **Load File Button** – Click to load an existing ScanControl Data File into the ScanControl Memory Area. You will be given the option to save the current data file, <u>if it has changed,</u> before it is overwritten. ScanControl is backward compatible with data files from previous software versions AND older scanners with some radio models. This means if you upgrade from a BC245XLT to the BC780XLT, BC250D, BC785D, SC230, BC246T, BR330T or BCD396T scanner your old data files from your BC245XLT can be directly loaded into ScanControl with no re-keying or lost data. Keep in mind the data files are upward compatible and converted to the new radio format when loaded. In other words a data file from the BC95XLT, BC245XLT, BC895XLT, BC898T, BCT8 can be used with the BC780XLT, SC230, BC246T, BR330T, BCT396T, BCT15, BCD996T and the BC250D, etc., but once loaded the file is converted to the new radio format in

ScanControl Memory for saving under another name. However, you can't go the other way. A data file created for the BC246T or BCD396T cannot be used directly with the BC780XLT or the BC245XLT. You would need to use one of the other data export or copy functions available in ScanControl to move data in this direction.

- o **Save File Button** – Click to save the current ScanControl Memory Area to a data file on the PC's hard disk. You can save the current data file using its current name or you can enter a new name for it thereby creating a different data file.
- o **Current File Window** – Displays the name of the current active data file.
- o **Updated On Window** – Displays the date the active data file was last updated.
- o **From Radio:** - Displays the type of radio the current active data file was created for. When a data file is loaded into ScanControl, and no radio is connected to your PC, ScanControl automatically reconfigures itself for the radio type found in the data file. This enhancement allows the user to make data edits to any data file, regardless of which radio it was created for, even if no radio is connected.

- **System Navigator Section**
  - o **List Expand / Collapse Checkbox** – Checkbox to expand (checked) or collapse (unchecked) the System Navigator list box. When collapsed the list displays the system number, the system name and the system quick key (if assigned) assigned to each system. When expanded the list box displays the system information plus all the sites & groups configured in each system along with their type (S = Trunk Site, C = Conventional, T = Trunk Talkgroup, R = Racing Group) and their respective numbers and quick keys if assigned. **Double clicking on any item opens that system, site or group item for editing, programming or loading.**
  - o **System Type List Box** – Displays the System Type, Conventional or Trunk Type assigned to each of the systems in the ScanControl Data File. Trunk type designations are dynamic and change to reflect the nomenclature used by the radio type in use.
  - o **Edit Sys Button** – Launches the Edit Systems Screen (See Below). This screen allows you to enter frequencies, set control attributes, enter alphanumeric tags and enter Talkgroup data (if a Trunked System) for each system. All entries made are saved in the ScanControl Data File.
  - o **Print All Button** – Prints all system, group, frequency, control attributes, alphanumeric tags and Talkgroup data (if a Trunked system) to the default printer. Each system's data is printed on a separate page.
  - o **Print Map Button** - The MAP displays the System Quick Key and other system attributes along with the Group hierarchy shown graphically under the system heading.
  - o **Edit Settings** – Used to select the appropriate edit settings screen by selecting one of the valid choices using the radio buttons and then clicking on the Edit button.
    - ▪ **Custom Search Settings** – Launches the Custom Search Settings edit screen. See below for details on how to use this screen.
    - ▪ **Service Search Settings** - Launches the Service Search Settings edit screen. See below for details on how to use this screen.
    - ▪ **Tone Out Settings** - Launches the Tone Out Settings edit screen. See below for details on how to use this screen.
    - ▪ **Location Alerts** – Launches the Location Alerts Settings edit screen for the BCT15 and BCD996T only. See below for details on how to use this screen.

- ▪ **Weather / SAME Settings -** Launches the Weather Alert / SAME Settings edit screen. See below for details on how to use this screen.
- ▪ **L/O Settings –** Launches the Radio Lockouts screen. See below for details on how to use this screen.
- **Load Fr / Prog To Radio Section**
  - o **From Button** – Selects direction of data flow when All Systems button is clicked. FROM loads data from radio.
  - o **To Button** - Selects direction of data flow when All Systems button is clicked. TO programs data to radio.
  - o **All Systems Button** – Click to copy all Systems & Groups to / from the ScanControl Memory Area. This button is disabled if no radio is connected.
- **Functions Section**
  - o **Control / Monitor Radio Button**
  - o **Program Options Button** – Launches the Program Options screen. *(See detail screen description below.)*
  - o **Logging Checkbox** – Enables / disables the program logging function. The initial default is to have logging enabled. Checking or un-checking this box changes the default setting.
- **Operations Controls**
  - o **Help Button** – Click to open this Help file.
  - o **Exit Button** – Click to exit the program. All updated default settings are stored and if any ScanControl© Memory Area changes have been made you will be given the option to save them in the existing file or save them in a new file.
- **Status Display Section**
  - o **Bat Lvl Gauge (SC230, BC246T, BR330T, BCD396T)** – Displays the percent battery life left in the scanner. The bar remains green if the battery level remains above 25% available but changes to red when the battery level drops below 25%.
  - o **Status Display Window** – Displays program status information.
  - o **Date Display Window** – Displays the current system date.
  - o **Time Display Window** – Displays the current system time.

Edit Systems Screen (Frequencies & Talkgroups)

The Edit Systems Screen consists of four main sections. 1) The System Tabs, 2) The Radio System Frame, 3) The Site / Group Frame and 4) The Frequency / Talkgroup Frame. Each section allows the user to perform configuration and data changes for the radio systems being stored in ScanControl Memory and programmed into the radio. See the detail descriptions below for more information about how to use each of these sections.
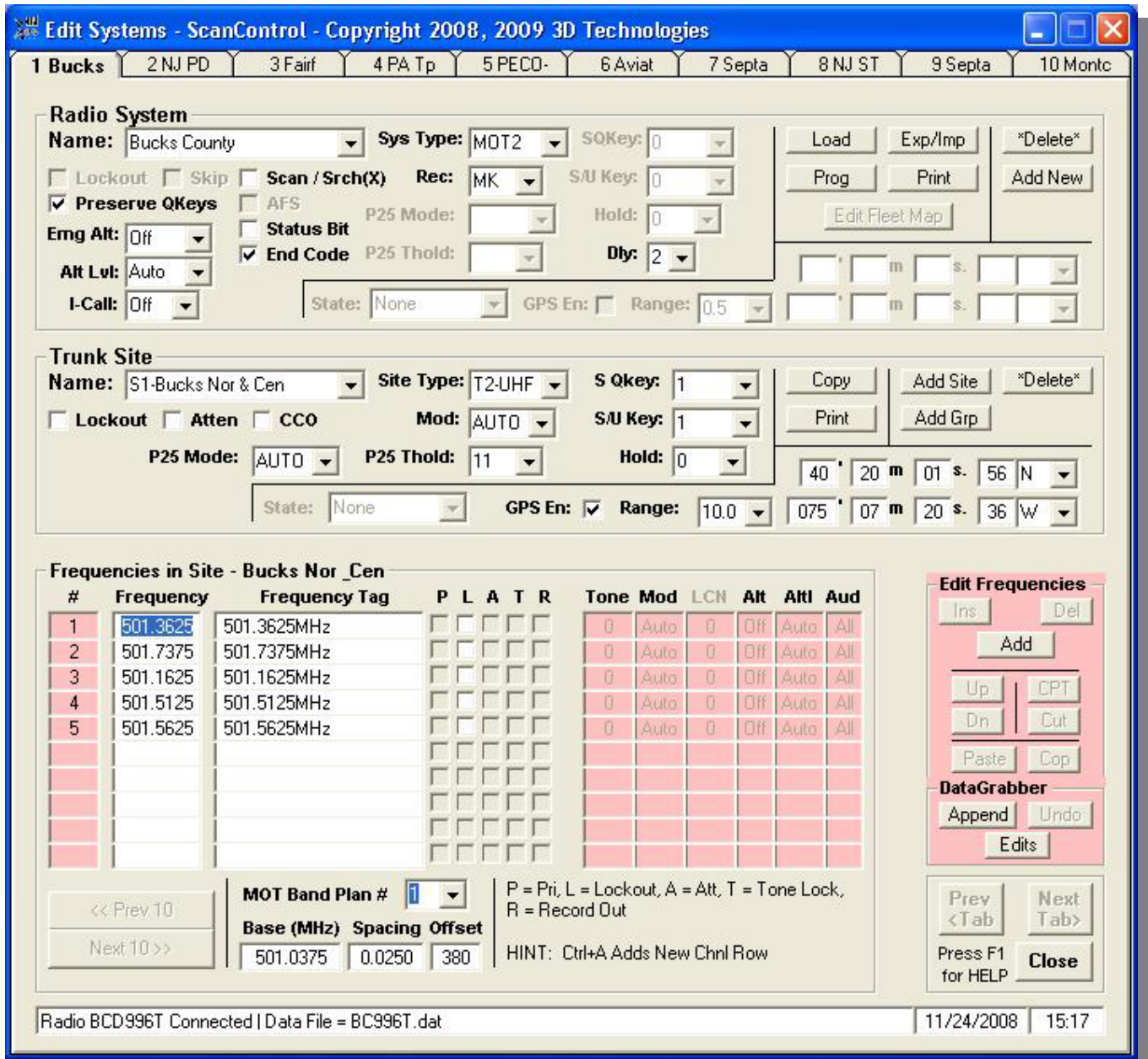
Figure 10 - Edit System Screen – BCT15, BCD996T

Figure 11 – Edit System Screen – SC230, BC246T, BR330, BCD396T
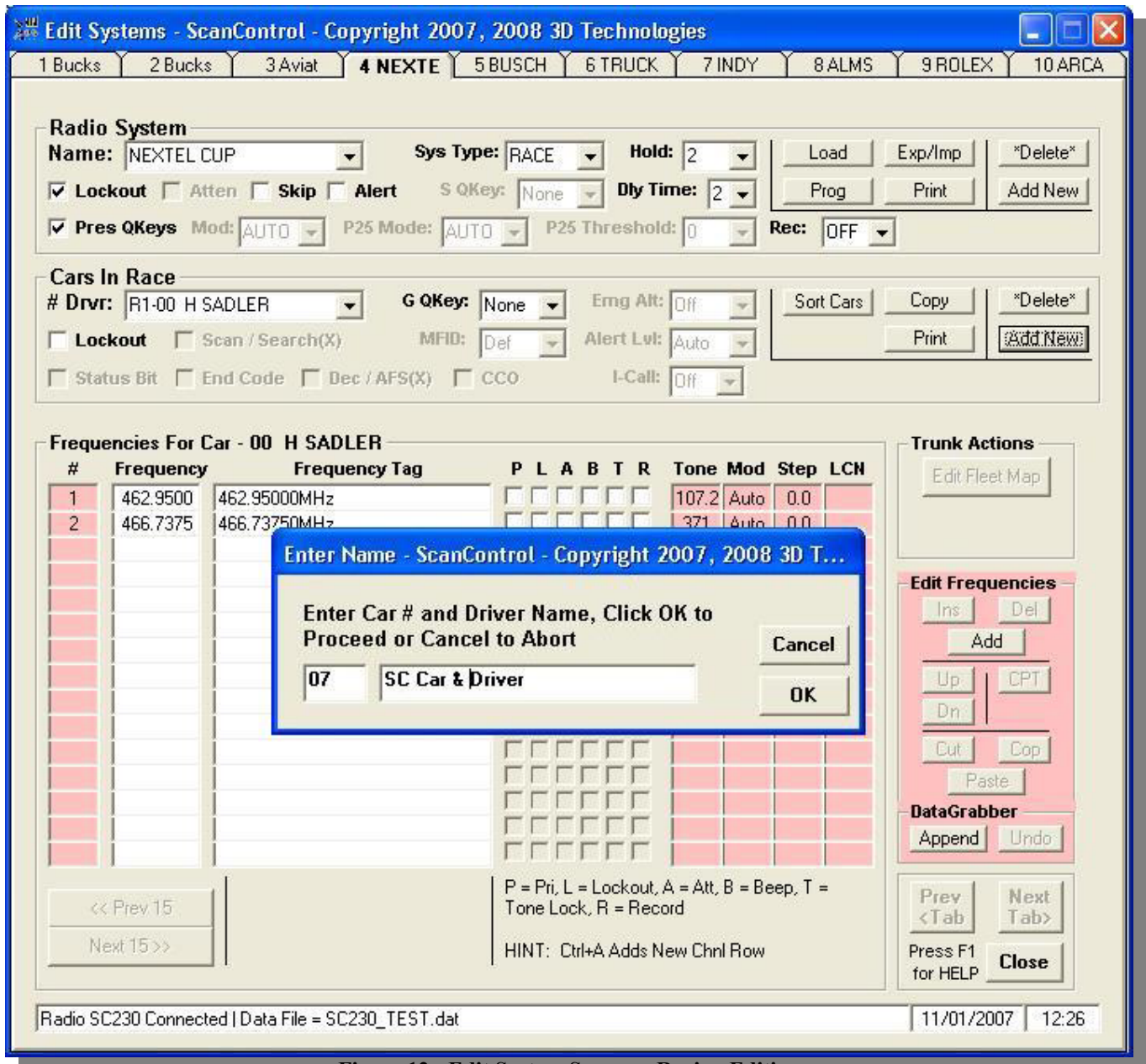
Figure 12 - Edit System Screen – Racing Edition

- **System Tabs** – Selects the system to be edited.
- **System Frame** – Used to create, configure, edit, update, delete, copy, print, program and load system level data.
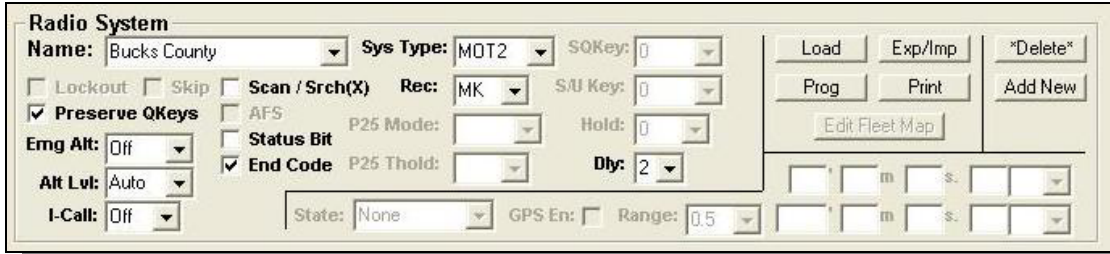
Figure 13 - System Frame - Edit Systems Screen – BCT15, BCD996T
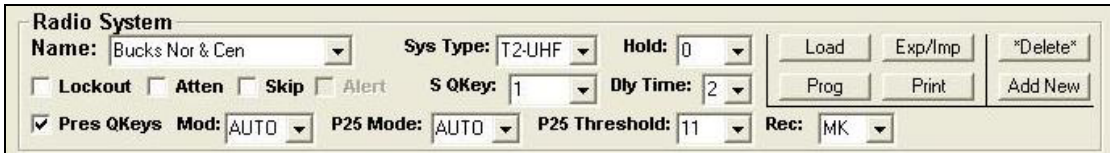
Figure 14 - System Frame - Edit Systems Screen – SC230, BC246T, BR330T, BCD396T

o **Name** – Drop down list box used to display / select the currently selected System. This tag is stored in the ScanControl Memory Area and data file.

o **Sys Type** – Drop down box to select the type of Trunked system being programmed. The Trunk system type determines the operating mode of the Trunked frequencies for that Bank. The default is CONV for a Conventional (Non Trunking) system. All other choices represent the different Trunked modes available for the connected radio type.

o **Hold** – Drop down list to select the hold time, in seconds. Hold time is the amount of time the scanner scans a system before moving to the next unlocked system.

o **Lockout** – Checkbox to set the Lockout attribute at the System level. Checked means the entire System is locked out of the radio scan.

o **Atten** – Checkbox to set the Attenuate attribute at the System level. Checked means Attenuation is on for the entire system.

o **Skip** – Checkbox to set the Skip attribute at the System level.

o **Alert** – Checkbox to set the Alert attribute at the System level.

o **Q Key** – Drop down list box to select the Quick Key # for the selected System.

o **S/U Key** - Drop down list box to select the Start Up Key # for the selected System.

o **Dly Time** – Drop down list box to select the Delay Time value, in seconds, at the System level.

o **Modulation (BR330T, BCT396T)** – Drop down list box to select the radio system modulation mode for the selected system.

o **P25 Mode (BCD396T, BCD996T Only)** – Drop down list box to select the P25 Mode for digital audio Trunked systems. See the radio Owner's Guide for details on this setting.

o **P25 Threshold (BCD396T, BCD996T Only)** – Drop down list box to select the P25 Threshold for digital audio trunked systems. See the radio Owner's Guide for details on this setting.

o **Emg Alt (BCT15, BCD996T Only) –** Drop down list box to select the Emergency Alert mode at the System level.

o **Alert Lvl (BCT15, BCD996T Only) –** Drop down list box to select the Emergency Alert volume.

o **Scan / Search(X) –** Checkbox to select the Scan / Search mode for a Trunked system. Unchecked means use ID Scan, checked means use ID Search.

o **Status Bit –** Checkbox to set the Status Bit attribute for the System in a trunked system.
o **End Code –** Checkbox to set the End Code attribute for the System Frequency Group in a trunked system.
o **AFS –** Checkbox to set the Dec / AFS mode for TGID display in a trunked system. Checked means AFS TGID display.
o **I-Call –** Drop down list to set I-Call mode for the System in a trunked system.
o **Preserve QKeys –** Checkbox to set option for preserving the current system Quick Key settings when programming a system.
o **State (BCT15 Only) -** Drop down list box to select the state / province for location based scanning. Conventional systems.
o **GPS Enable (BCT15, BCD996T Only) –** Checkbox to enable / disable GPS location mode for location based scanning. Conventional systems.
o **Range (BCT15, BCD996T Only) –** Drop down list to select distance in miles for the radius of a circle surrounding the transmitter location. Used during location based scanning. Conventional systems.
o **LAT / LONG (BCT15, BCD996T Only) –** Latitude / Longitude coordinates of transmitter in degrees, minutes, seconds & hundredths of seconds. Conventional systems.
o **Rec** – Drop down list to enable / disable audio out recording at the system level.
o **Edit Fleet Map** – Launches the Edit Fleet Map Screen. See screen details below.
o **Load Button** – Click to copy all System and Group data in the selected System from the scanner's radio memory to the ScanControl Memory Area. Any frequency and control attribute information for each group in the ScanControl Memory Area will be overwritten by the radio data. This button is disabled if no radio is connected.
o **Prog Button** – Click to copy all System and Group data in the selected system from the ScanControl Memory Area to the scanner's radio memory. Any frequency and control attribute information for each group in the radio will be overwritten by the new data. This button is disabled if no radio is connected.
o **Export/Import Button** – Opens the Export / Import System Data Screen (See Below).
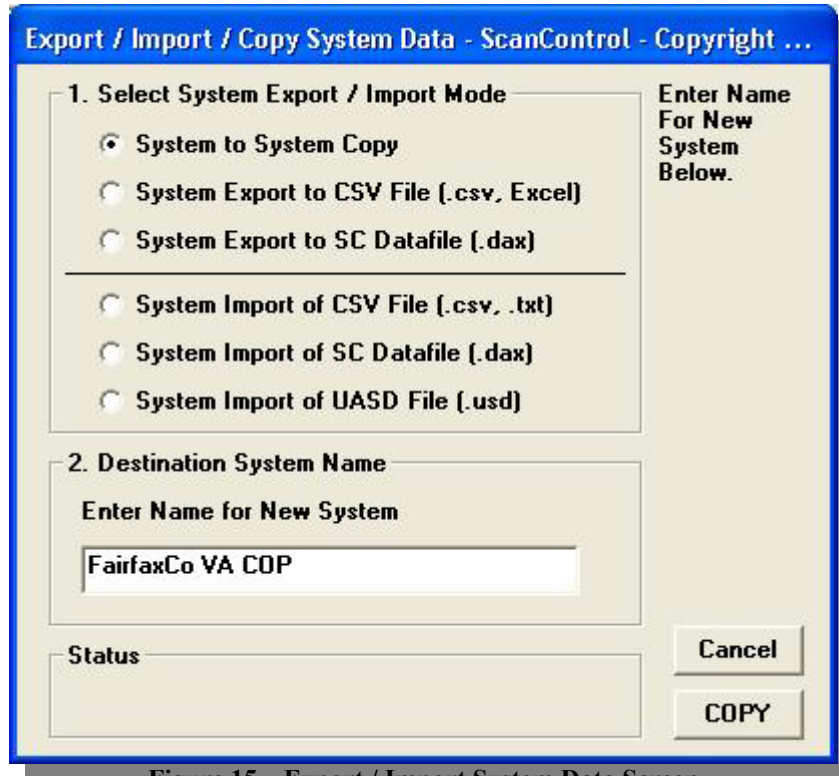
Figure 15 – Export / Import System Data Screen

- **System to System Copy** – Copies all system data in the currently selected system to a new system placed at the end of the System Navigator list. User can enter a new name for the copied system or accept the default.
- **Sys Export to CSV File (.csv, Excel)** – Exports all system data in the currently selected system to a .csv file for use by text editors and other applications such as MS Excel.
- **Sys Export to SC Datafile (.dax)** – Exports all system data in the currently selected system to a ScanControl single system data file with a .dax filename. DAX files can be used to interchange complete system data between ScanControl users with like radios. **In a future release DAX will be interchangeable between users with different DMA radio types.**
- **Sys Import of CSV File (.csv, .txt)** – Opens CSV Import screen to allow system data importation into the currently selected system.
- **Sys Import of SC Datafile (.dax)** – Imports an existing DAX file into the currently selected system.
- **Sys Import of UASD File (.usd)** – Imports and translates an existing UASD system file into the currently selected system. ScanControl **will** translate UASD files from different DMA radios into a system for the currently connected radio.

- o **Print Button** – Click to print all System and Group data for the selected system to the default printer.
- o **Delete Button** – Click to delete the selected system from the ScanControl Memory Area. You are then given the option to also delete the system from the scanner's radio memory.

o **Add New Button** – Click to add a new system into the ScanControl Memory Area. *NOTE: To maintain data integrity between the radio and ScanControl Memory the program will not allow duplicate system names to be entered. If you try to create a new system with a name identical to an existing system ScanControl will display an error message and ask you to choose another name.*

- **Site / Group Frame** – Used to create, configure, edit, update, copy, print, program and load Site and Group level data for each site and group associated with the selected system.
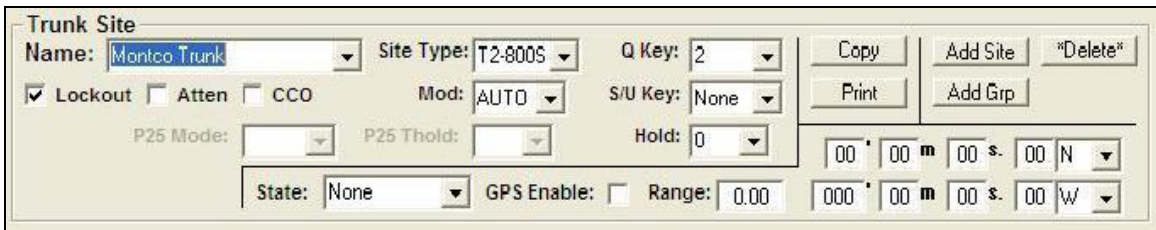
Figure 16 - Site Frame - Edit Systems – BCT15, BCD996T

Figure 17 - Group Frame - Edit Systems – SC230, BC246T, BR330T, BCD396T

o **Site Type –** Drop down box to select the type of Trunked site being programmed. The Trunk site type determines the operating mode of the Trunked frequencies for that system. All choices represent the different Trunked modes available for the connected radio type.

o **Site Mod** - Drop down list box to select the site modulation mode for the selected system.

o **Site Q Key –** Drop down list box to select the Quick Key # for the selected Site.

o **Site S/U Key –** Drop down list box to select the Start Up Key # for the selected Site.

o **Site Hold –** Drop down list to select the hold time, in seconds. Hold time is the amount of time the scanner scans a site before moving to the next unlocked site.

o **Site P25 Mode** – Drop down list box to select the P25 Mode for digital audio Trunked sites. See the radio Owner's Guide for details on this setting.

o **Site P25 Threshold** – Drop down list box to select the P25 Threshold for digital audio trunked sites. See the radio Owner's Guide for details on this setting.

o **Site State (BCT15 Only) -** Drop down list box to select the state / province for location based scanning. Trunked sites.

o **Site GPS Enable (BCT15, BCD996T Only) –** Checkbox to enable / disable GPS location mode for location based scanning. Trunked sites.

o **Site Range (BCT15, BCD996T Only) –** Drop down list to select distance in miles for the radius of a circle surrounding the transmitter location. Used during location based scanning. Trunked sites.

o **Site LAT / LONG (BCT15, BCD996T Only) –** Latitude / Longitude coordinates of transmitter in degrees, minutes, seconds & hundredths of seconds. Trunked sites.

- o **Group Name –** Drop down list box used to display / select the currently selected Group. This tag is stored in the ScanControl Memory Area and data file.
- o **Group Quick Key –** Drop down list box to select the Quick Key # for the selected Group.
- o **Group Emg Alt (BR330T, BCT396T, BCT15, BCD996T Only) –** Drop down list box to select the Emergency Alert mode at the Group level.
- o **Group Alert Lvl (BR330T, BCT396T, BCT15, BCD996T Only) –** Drop down list box to select the Emergency Alert volume.
- o **Group Lockout –** Checkbox to set the Lockout attribute at the Group level. Checked means the entire Group is locked out of the radio scan.
- o **Group Atten -** Checkbox to set the Attenuate attribute at the Site level. Checked means Attenuate mode is on for the site..
- o **Group Scan / Search(X) (BC246T, BR330T, BCD396T Only) –** Checkbox to select the Scan / Search mode for a Trunked system. Unchecked means use ID Scan, checked means use ID Search.
- o **Group MFID (BCD396T Only) –** Drop down list box to select the ID Mode for a Trunked system.
- o **Group Status Bit (BC246T, BR330T, BCD396T Only) –** Checkbox to set the Status Bit attribute for the System Frequency Group in a trunked system.
- o **Group End Code (BC246T, BR330T, BCD396T Only) –** Checkbox to set the End Code attribute for the System Frequency Group in a trunked system.
- o **Group Dec / AFS(X) (BC246T, BR330T, BCD396T Only) –** Checkbox to set the Dec / AFS mode for TGID display in a trunked system. Checked means AFS TGID display.
- o **Group I-Call (BC246T, BR330T, BCD396T Only) –** Drop down list to set I-Call mode for the System Frequency Group in a trunked system.
- o **Group CCO** – Control Channel Only mode: When this function is activated, trunking is performed using Control Channel data only. Voice channel frequencies do not have to be programmed into the radio. This feature only applies to Motorola 800 MHz and 900 MHz systems.
- o **Group Sort Cars (Racing Systems Only)** – Reorders the list of Cars / Drivers in the Group in ascending car number order. This feature uses a special renumbering algorithm that takes into account 1, 2 and 3 digit numbers, including leading zeros. This means that car number 0, car number 00 and car number 000 are treated uniquely and would be sorted in order. As an example if you entered 10 cars into the Group numbered: 7, 01, 00, 70, 23, 06, 002, 17, 009, 09. Then, after clicking the Sort button ScanControl would reorder the cars in the Group for easy access into the following order: 00, 01, 002, 06, 7, 09, 009, 17, 23, 70. The user would then program the System into the radio with the cars in this order.
- o **Copy Button** – Copies all Group data to a new Group within the selected System.
- o **Print Button** – Click to print all Group data for the selected Group to the default printer.
- o **Delete Button** – Click to delete the selected Group from the ScanControl Memory Area.
- o **Add Site Button** – Click to add a new Site into the ScanControl Memory Area.
- o **Add Grp Button** - Click to add a new Group into the ScanControl Memory Area.

- **Frequency / Talkgroup Frame –** Used to enter and edit Group data such as frequencies for conventional and trunked systems and Talkgroup IDs for trunked systems. This frame has

multiple uses and its' layout will change based on what function the user is trying to perform. If the user selects or creates a frequency group within a conventional system then all the frequencies and attributes for that group can be entered and edited within this frame. If the user is editing a trunked system and has created a new Talkgroup group then this frame is used to enter all the Talkgroup ID data and attributes for all the talkgroups to be included in that group. It's worth noting that each radio system can contain multiple groups. Each group will contain either frequencies or Talkgroup IDs. The type of data a Group contains is determined by the type of system being edited.

- **Frequency / Talkgroup Frame - Frequencies:**

Figure 18 - Group Data Frame – Frequencies – BCT15, BCD996T

Figure 19 - Group Data Frame – Frequencies – SC230, BC246T, BR330T, BCD396T

- o **#** - Displays the absolute number from 1 to the maximum number of frequencies in the Group. These numbers cannot be edited. The << Prev 15 and Next 15 >> buttons (see below) are used to move among all the frequencies in the Group
- o **<< Prev 15 (10)** – Click to display the previous screen of frequencies in the Group.
- o **Next 15 (10) >>** - Click to display the next screen of frequencies in the Group.
- o **Frequency** – Data entry field for frequency for the selected Channel within the selected Bank. Up to 8 digits of frequency information can be entered but the decimal point MUST be entered for the desired frequency. e.g. typing 4 3 . 2 5 will result in the entry of 043.2500 being displayed in the field. Typing 8 1 0 . 0 2 5 will result in the entry of 810.0250 being displayed in the field. If the decimal point is not entered the program will not know how to parse the digits and therefore an error message will result. You will then be given another opportunity to enter the frequency. *NOTE: The frequency value entered must be within the operational range of the connected scanner or an error will occur during programming.*
- o **Frequency Tag** – Data entry field for the alphanumeric tag associated with the selected frequency. This tag is stored in the ScanControl Memory Area and data file. The SC230, BC246T, BR330T, BCD396T and BCD996T store the first 16 characters of this tag in the radio.
- o **P, L, A, T, R** – Checkboxes for control attributes for each selected frequency within the selected Site / Group. P = Priority, L = Lockout, A = Attenuate, T = Tone Lock, R = Record Out.
- o **Tone** – Data display field for CTCSS or DCS Tone Code selection data for the selected frequency. See your radio Owner's Manual for details on the selections available and what they mean. Clicking on this Tone box brings up the Tone/Mode/Step/LCN selection screen. (See Below)

o **Mode / Step / Alert / LCN / Aud** - Data display field for Radio Mode (AUTO, AM, FM, NFM) setting, Step (KHz) setting, Alert (BCD396T), Alert Level (BCD396T), LCN (Logical Channel Number) setting, Aud (Audio Type) setting (BCD996T). The appropriate boxes are grayed out or not visible when the radio in use doesn't support the setting or the frequency is designated as a trunked frequency. **Clicking on any of these boxes brings up the Tone/Mode/Step/Alert/ LCN selection screen for the chosen frequency (See Below).**
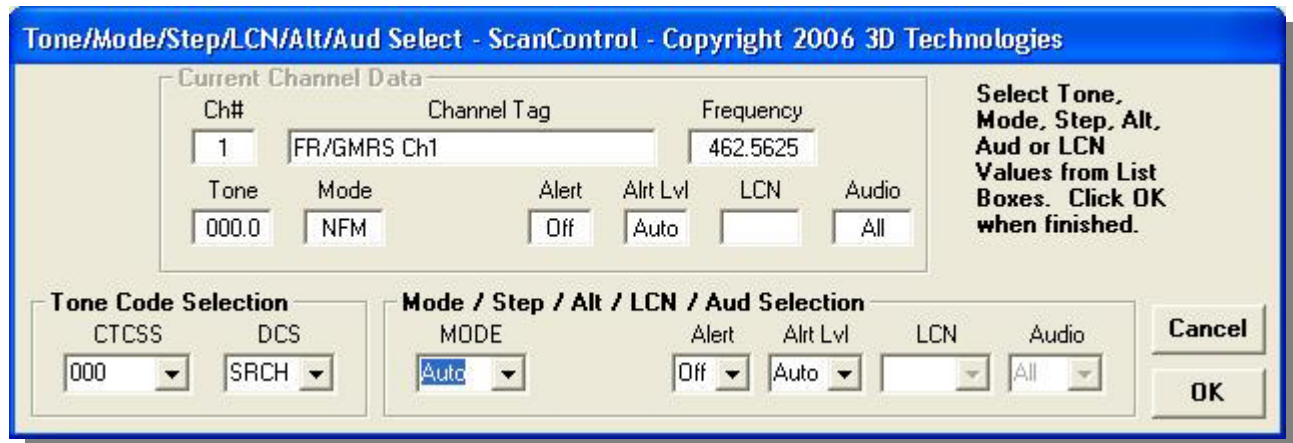
Figure 20 - Tone / Mode / Step / Alrt / LCN / Audio Select

Motorola Band Plan # – Drop down list of available Motorola Band Plans for the radio in use. This is normally a value between 1 and 3. By selecting plan #1, #2 or #3 you are selecting that configuration for setting the appropriate Base, Spacing and Offset parameters. All valid base configurations are then programmed into the bank when you perform the Program System step.

o **Base** –Data entry field for Base Frequency in the selected Base Configuration. If a system is configured as a Type 2 UHF or VHF (Motorola Type II UHF or VHF) then a Base Frequency must be entered. This box will only appear if the corresponding System Type is selected above. Default values will appear the first time the System Type is selected. Consult your radio Operations Guide for appropriate values.

o **Spacing** – Data entry field for Spacing Frequency in the selected Base Configuration. If a system is configured as a Type 2 UHF or VHF (Motorola Type II UHF or VHF) then a Spacing Frequency value must be entered. This box will only appear if the corresponding System Type is selected above. Default values will appear the first time the System Type is selected. Consult your Operations Guide for appropriate values.

o **Offset** – Data entry field for Offset Channel in the selected Base Configuration. If a system is configured as a Type 2 UHF or VHF (Motorola Type II UHF or VHF) then an Offset Channel value must be entered. This box will only appear if the corresponding System Type is selected above. Default values will appear the first time the System Type is selected. Consult your Operations Guide for appropriate values.
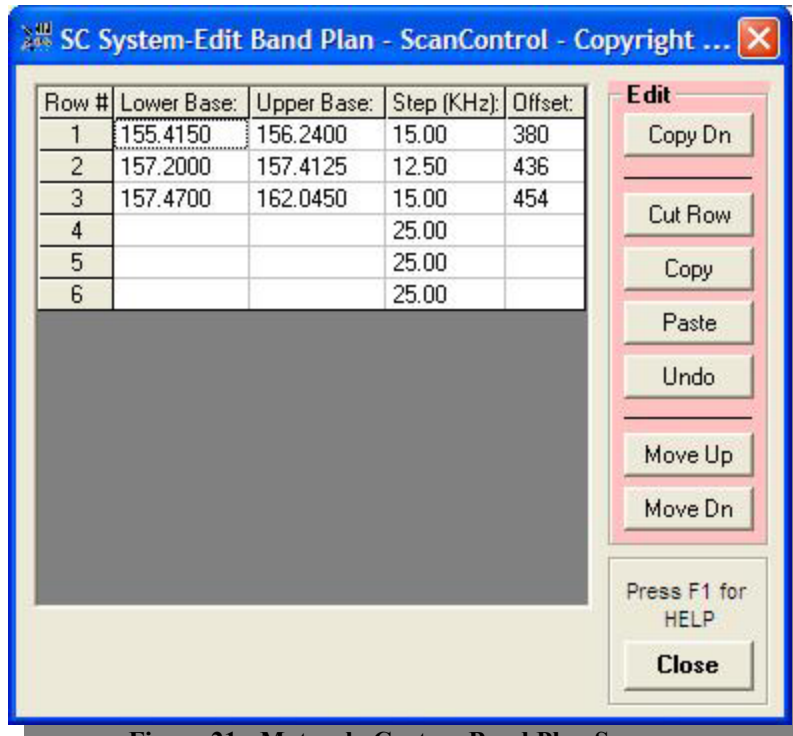
Figure 21 - Motorola Custom Band Plan Screen

Motorola Custom Band Plan Screen – Selecting a trunk system/site type of M-800C will enable the "Edit Bandplan" button on the bottom of the System Editor screen. Clicking the Edit Bandplan button will open the Custom Bandplan screen above.

- **Trunk Table Grid**
  - **Custom Trunk Table Entry Rows** – Some Motorola Trunk Systems require the entry of custom trunk system values into the radio to insure proper monitoring. The Trunk Table screen provides an input entry screen for these values.
- **Edit Section**
  - **Copy Dn Button** - Copies a cell, or range of cells in a row, to all the highlighted cells below the selected cells. This is very handy for quickly repeating values into the rows below selected cells.
  - **Cut Row Button** – Cuts a row of values out of the grid and places them into the clipboard for later pasting.
  - **Copy Button** - Copies a cell, or range of cells, into the clipboard for later pasting
  - **Paste Button** - Pastes the clipboard data resulting from a Cut Row or Copy action.
  - **Undo Button** - Reverses the last Copy Dn, Cut Row, Copy, Paste or DataGrabber Paste action.
  - **Move Up Button** - Move the selected row up one row.
  - **Move DnButton** - Move the selected row up one row.
- **Operation Controls**
  - **Close Button** – Click to close the Trunk Table screen.

APCO Band Plan # (BCD996T Only) – Drop down list of available Band Plans for APCO MP25 systems for the radio in use. This is a value between 1 and 32. By selecting a plan # you are selecting

that configuration for setting the appropriate Base and Spacing parameters. All valid base configurations are then programmed into the bank when you perform the Program System step.

- o **Base** –Data entry field for Base Frequency in the selected Base Configuration. If a system is configured as a MP25 then a Base Frequency must be entered. This box will only appear if the corresponding System Type is selected above. Default values will appear the first time the System Type is selected. Consult your radio Operations Guide for appropriate values.
- o **Spacing** – Data entry field for Spacing Frequency in the selected Base Configuration. If a system is configured as a MP25 then a Spacing Frequency value must be entered. This box will only appear if the corresponding System Type is selected above. Default values will appear the first time the System Type is selected. Consult your Operations Guide for appropriate values.

- **Frequency / Talkgroup Frame - Talkgroup IDs:**

Figure 22 - Group Data Frame - Talkgroup IDs – BCT15, BCD996T

Figure 23 - Group Data Frame - Talkgroup IDs – SC230, BC246T, BR330T, BCD396T

- **TGIDs in Group Section** – Talkgroup data entry fields for the selected Group.
    - o **#** – Displays the Talkgroup number in the group. These numbers cannot be edited.
    - o **TGID** – Data entry field for the Talkgroup ID. This can be up to a 6 digit number as assigned by the Trunked radio system. Four formats are valid for Talkgroup IDs: Type II / LTR format (000000), Type I format (000-0[0]), EDACS AFS format ([0]0-000) and EDACS decimal format (000000) without leading zeros. ScanControl edits the ID entries and checks for valid format based on trunk system type defined for the system you are programming.
    - o **TGID Tag** - Data entry field for the alphanumeric tag associated with the selected Talkgroup ID. This tag is stored in the ScanControl Memory Area and data file.
    - o **L** - Checkbox to designate Lockout attribute ON or OFF for a Talkgroup ID within a Group.
    - o **R** - Checkbox to designate Record Out attribute ON or OFF for a Talkgroup ID within a Group.
    - o **Alt (BR330T, BCT396T, BCT15, BCD996T Only)** – Text box displaying the Alert mode for the selected Talkgroup ID. Clicking on this box will open the TGID Alert Select screen for editing the Alert settings (See Below).
    - o **Altl (BR330T, BCT396T, BCT15, BCD996T Only)** – Text box displaying the Alert volume level for the selected Talkgroup ID. Clicking on this box will open the TGID Alert Select screen for editing the Alert settings (See Below).
    - o **Aud (BCD996T Only)** - Text box displaying the Audio type for the selected Talkgroup ID. Clicking on this box will open the TGID Alert Select screen for editing the settings (See Below).
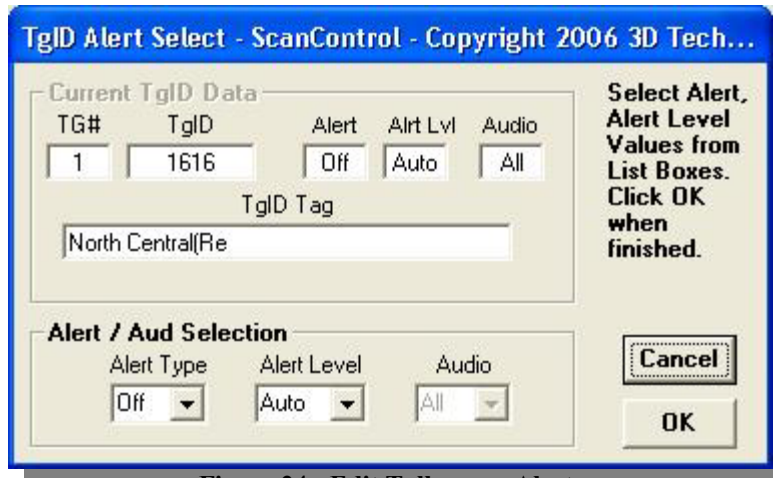
Figure 24 - Edit Talkgroup Alerts

- **Trunk Actions Section**
  - **Edit Fleet Maps Button** – Enabled if the System type is designated as Motorola Type I (E1). Click to launch the Edit Fleet Maps Screen (See Below).
- **Edit Rows Section – Frequencies or Talkgroup IDs**
  - **Edit: Ins** – INSERT - Inserts an empty frequency or Talkgroup ID row in the current location and moves all subsequent rows down the list. The cursor must be in the Tag field for this function to operate.
  - **Edit: Del** – DELETE - Deletes the data in the current frequency or Talkgroup ID row and moves all subsequent rows up the list. The cursor must be in the Tag field for this function to operate.
  - **Add** – ADD - Adds a new row at the end of the list so a new frequency or Talkgroup ID can be entered. *Hint: Pressing Ctrl + A also performs this function.*
  - **Edit: Up -** UP - Moves the current row data up one row in the list. The cursor must be in the Tag field for this function to operate.
  - **Edit: Dn** – DOWN - Moves the current row data down one row in the list. The cursor must be in the Tag field for this function to operate.
  - **Edit: CPT** – COPY PRIOR TAG – Copies the contents of the prior Tag field to the current row. Saves time when entering multiple rows that will have the same or similar alphanumeric tags. The cursor must be in the Tag field for this function to operate. *Hint: Pressing Ctrl+C keys also performs this function while the cursor is in the Tag field.*
  - **Edit: Cut** – CUT – Picks up the entire row and places it into a "clipboard" for later pasting. The row data is replaced with default settings for that row. The cursor must be in the Tag field for this function to operate.
  - **Edit: Cop** – COPY – Copies the entire row and places it into a "clipboard" for later pasting. The row data is left unchanged. The cursor must be in the Tag field for this function to operate.
  - **Edit: Paste** – PASTE – Pastes the row from the "clipboard" into the current row location. Paste overwrites any data that is in the current row. The cursor must be in the Tag field for this function to operate.

> o **Prev Tab <** - When the radio contains more than 20 systems these buttons provide for navigation between groups of 20 tabs.
> o **Next Tab >** - When the radio contains more than 20 systems these buttons provide for navigation between groups of 20 tabs.

- **DataGrabber Section**
  - o **Paste Button** - Click to paste frequencies into the Group from the DataGrabber clipboard.
  - o **Undo Button** – Click to undo the last DataGrabber paste action.
  - o **Edit Button** – Opens the DataGrabber Edits screen *(see below)*.

```
DataGrabber Edits - ...

You can control certain features of the
DataGrabber using the Edits fields
below.  The Strip Phrase entered will
be stripped out of any alpha tag being
pasted.  This screen must remain open
for the Strip Phrase to work.

DG Paste Strip Phrase
[                          ]

User supplied SmartTags can be added
and deleted below.  User SmartTags
are stored in a file and applied during
all DataGrabber Pastes.

SmartTag Phrase
[                          ]

SmartTag Abbrev              [ Add ]
[                ]           [ Del ]

[Airpt] = [Airport]
[Ambu] = [Ambulance]
[Bur] = [Bureau]
[Cent] = [Central]
[Cmd] = [Command]
[Comm] = [Commission]
[Conv] = [Conventional]
[Coord] = [Coordination]
[Co] = [County]
[CoWide] = [Countywide]
[Dept] = [Department]
[Depts] = [Departments]

Press F1           [ Close ]
for HELP
```

> o **Help Button** - Click to open this Help file.
> o **Close Button** – Click to close the Edit Systems Screen and return to the Main Control Screen.

- **Status Display Section**
  - o **Status Display Window** – Displays program status information.
  - o **Date Display Window** – Displays the current system date.

- o **Time Display Window** – Displays the current system time.

Edit Fleet Map Screen

The Edit Fleet Map Screen is only available for Banks configured for Trunked mode Motorola Type I (E1, T1 including T1 / T2 Hybrid). It gives the user the ability to select from 16 Preset Fleet Maps stored in the BC246T, BR330T, BCD396T and BCD996T scanners or to manually program the 8 Fleet Map blocks with different block sizes to customize the Fleet Map. The selected Preset map or the manually programmed blocks are stored in the ScanControl Memory Area and can then be programmed into the scanner's radio memory. In DMA radios Fleet Maps are programmed / loaded as part of the System program / load processes.
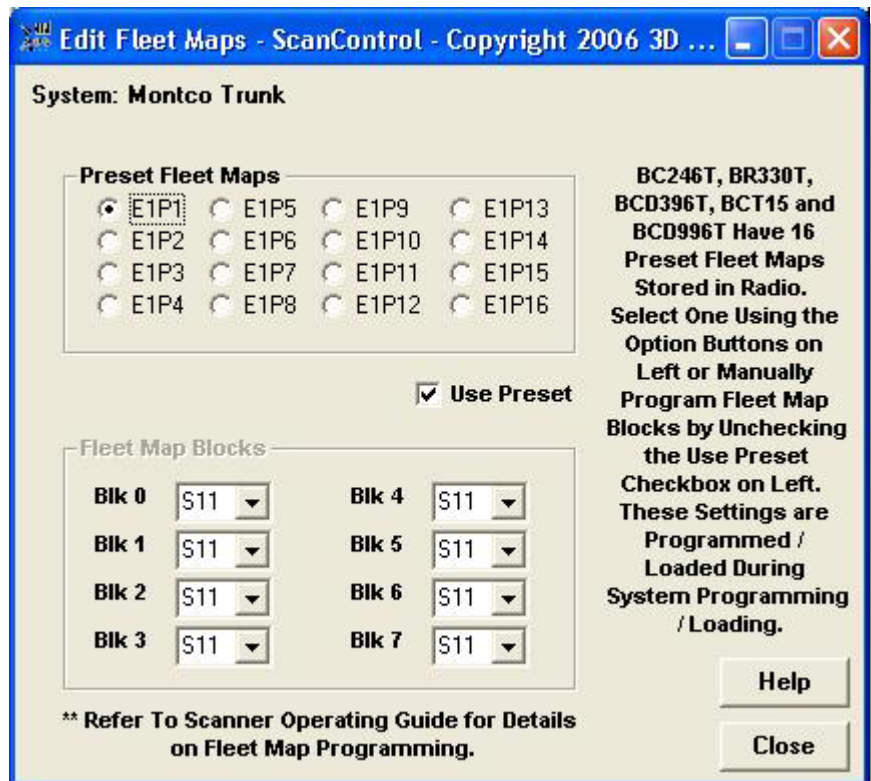

Figure 25 - Edit Fleet Map Screen - BC246T, BR330T, BCD396T, BCT15 and BCD996T

- **Preset Fleet Maps Section** – Preset Fleet Map selection fields for the selected Bank.
  - **Preset Fleet Maps: E1P1 – E1P16** – The user can select any one of the 16 available Preset Fleet Maps stored in the radio. Once selected, the Fleet Map can then be programmed into the Bank by clicking on the Prog Fleet Map button. See the radio Operating Guide for details on the available Presets and how to use them.
- **Fleet Map Blocks Section** – Program individual Fleet Map block sizes for the selected Bank
  - **Fleet Map Blocks: Blk0 – Blk7** – The user can select any one of the 16 different block sizes ("S0" – "S14" plus "—") for each of the available 8 Fleet Map blocks. Once selected, the Fleet Map can then be programmed into the Bank by clicking on the Prog Fleet Map button. *NOTE: Not all combinations of all block sizes are valid for programming. See the radio Operating Guides for details on Fleet Map block programming.*
- **Operations Controls**

- o **Use Preset Checkbox** – Checking this box enables the Preset Fleet Maps Section and disables the Fleet Map Blocks Section allowing the user to select a Preset Fleet Map. Unchecking this box disables the Preset Fleet Maps Section and enables the Fleet Map Blocks Section allowing the user to manually program the Fleet Map Blocks
- o **Help Button** - Click to open this Help file.
- o **Close Button** – Click to close the Edit Fleet Map Screen and return to the Edit Banks Screen.

DataGrabber Overview

Go to our DataGrabber web page (www.scannersoft.com/datagrabber.htm) for brief demonstration videos showing how to use the DataGrabber features.

The ScanControl DataGrabber revolutionizes the way you program frequency and talkgroup data into your Uniden scanner. Instead of manually typing hundreds of numbers and text tags into your PC you simply drag your mouse to highlight the frequency and talkgroup information you want, click Ctrl+Ins (the Windows copy keystroke) or your browser's Edit, Copy function and then click the Paste button in ScanControl. Tailored to work with RadioReference.com now, the popular on-line and most up to date radio system database, and other Web data sources in the future, the DataGrabber makes it easy and quick to capture radio system data and program it into your scanner.

(Terms of use: Use of the ScanControl DataGrabber is not intended to circumvent the requirement for a user subscription to RadioReference.com for downloading RadioReference.com data. 3D Technologies, the makers of ScanControl, urges its ScanControl users to abide by the Terms of Use for the data presented on RadioReference.com and purchase a subscription to their service in order to support their continuing efforts in maintaining the vast amount of radio system data they deliver over the public Internet. 3D Technologies will not be responsible for individual users found to be in violation of the RadioReference.com Terms of Use through the use of DataGrabber technology.)

- **DataGrabber Intelligence** - Other scanner programming software products offer data "imports" from RadioReference.com. But they import entire systems in one step and then the data needs to be manually configured and manipulated to fit your radio's memory structure or your personal preferences, or both. The DataGrabber gives you the flexibility to "grab" all the data in a system, or only the data you want, and paste it into the ScanControl editors "intelligently". During pasting the DataGrabber knows your radio's memory structure (banks & scanlists or systems, sites & groups) and offers options that make it easy to optimize your scanner memory and configure the data grouped the way you want it.

- **Data Aware** - The ScanControl DataGrabber is "data aware" during the pasting process. This means it knows the difference between conventional frequencies, trunk frequencies and talkgroup IDs and uses that knowledge to capture and configure the data for the type of bank or system you are programming. Conventional frequencies are brought over with alpha tags, CTCSS codes and modulation modes intact. Trunk frequencies are pasted correctly for single or multiple site systems.   Talkgroup IDs are pasted with format checking so you're sure of getting the right format for the trunk system type. Even LCN values are carried over for EDACS and LTR systems.

Using the DataGrabber

- **Grabbing Conventional Channels / Frequencies** - Using the RadioReference.com RR Database select a State and County to display the radio system data you are looking to capture. Scroll your web browser up or down to display the frequency or talkgroup ID data. See the example page below …
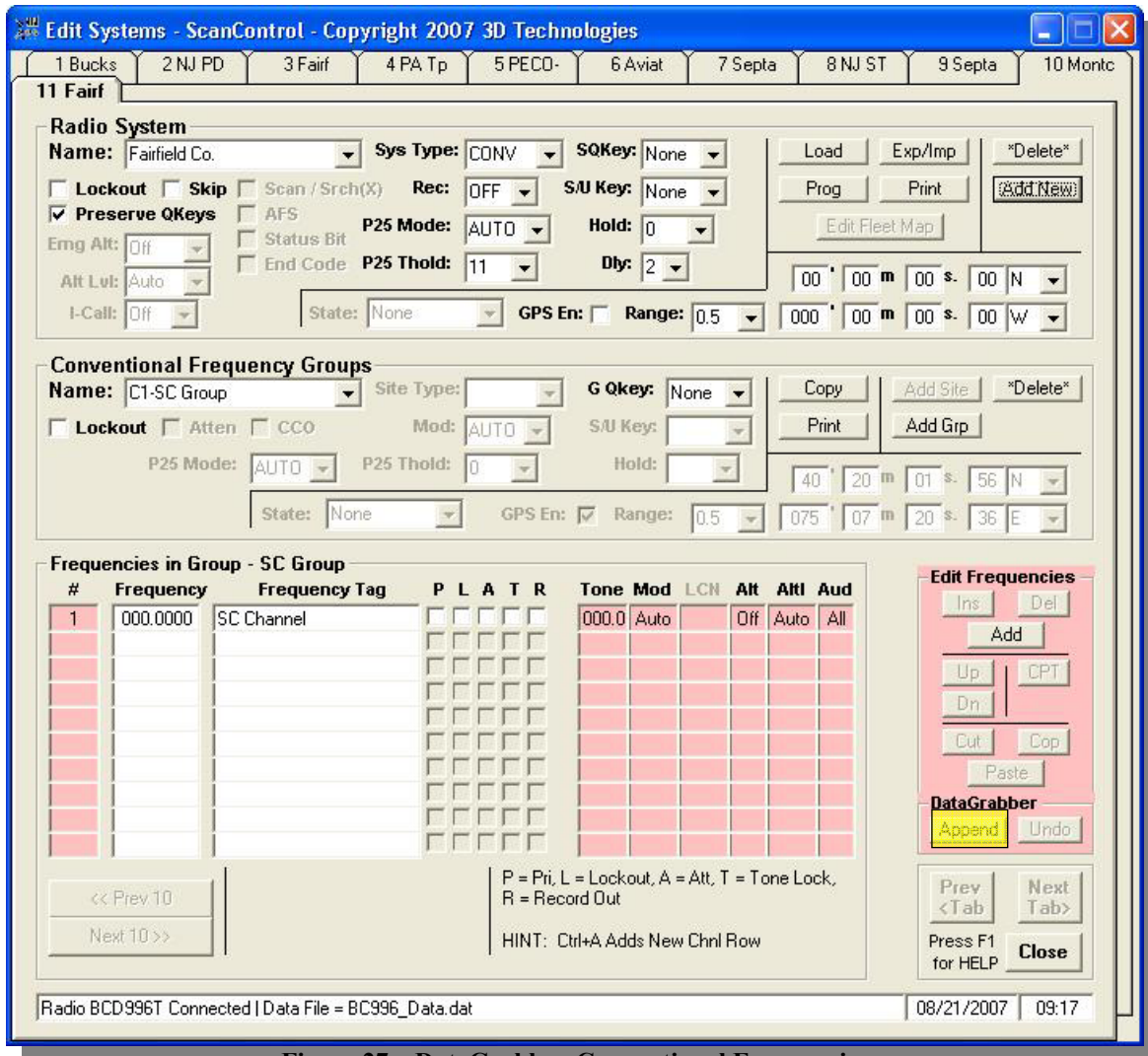
Figure 26 – DataGrabber:Conventional Frequencies

Highlight the desired rows of frequency data (see above) by dragging your mouse from the <u>upper left corner</u> of the row section to the <u>lower left corner</u> of the row section. <u>The DataGrabber needs to have the field name row ("Frequency, Input, License, … etc.") in at least one of the copy steps on any given web page.</u> <u>Be sure to highlight entire rows of data</u> or the DataGrabber will ignore them. Depending on your browser you can then select Edit, Copy or type Ctrl + C or Ctrl + Ins to copy the data to the Windows clipboard. ***NOTE: The highlighted area can span multiple "blocks" of data so in the example above you could have highlighted both the "Emergency Medical Communications Center" frequencies AND the "Bethel, Town of" frequencies in one copy action. In fact you can highlight ALL the frequencies for "Fairfield County" on the entire web page in one copy action.***

Open the System Editor and create a new system or open to an existing system. **BE SURE TO CORRECTLY SET THE SYSTEM TYPE BEFORE ATTEMPTING THE PASTE / APPEND.** The DataGrabber can APPEND the frequency rows to the data already in the Group or PASTE the frequency rows over the data already in the Group. To APPEND the data just click the DataGrabber Append button. To PASTE the data click on the Frequency Tag field of the row where you want the PASTE to start. The DataGrabber Append button label will change to read Paste then click the Paste button. *(NOTE: Your system editor may look slightly different than below depending on which model radio is in use.)*
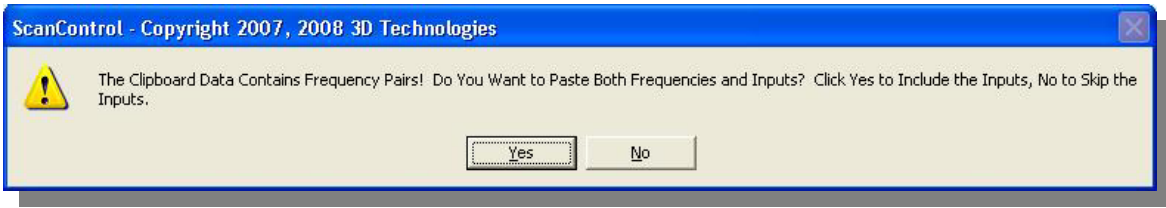

Figure 27 – DataGrabber:Conventional Frequencies

The DataGrabber will process the data rows and advise the user how many frequencies were found and processed. In the example above the DataGrabber has detected that some rows contained frequency pairs: both frequencies and inputs. The DataGrabber asks the user if he / she wants to paste both the primary frequency and the input or just the primary frequency.

ScanControl - Copyright 2007, 2008 3D Technologies

The Clipboard Data Contains Frequency Pairs! Do You Want to Paste Both Frequencies and Inputs? Click Yes to Include the Inputs, No to Skip the Inputs.

Yes   No

ScanControl - Copyright 2007 3D Technologies

DataGrabber Processed 4 Frequencies. Click OK to Paste / Append the Data Into This Site / Group, Cancel to Abort the Paste!

OK   Cancel

Clicking OK on the message screen will complete the Paste / Append. Clicking Cancel will abort the Paste / Append.

The DataGrabber has pasted the data rows (below) and accounted for the frequency, alpha tag, PL or CTCSS tone and modulation values found in the data rows. If the rows do not contain any of these data elements they will be defaulted during the Paste / Append. The alpha tag has been truncated to the maximum of 16 characters supported in the radio. Note also the Undo button has become un-grayed after the Paste / Append. You can use the Undo button to reverse the Paste / Append action and return the Group data back to what it was before the Paste / Append.
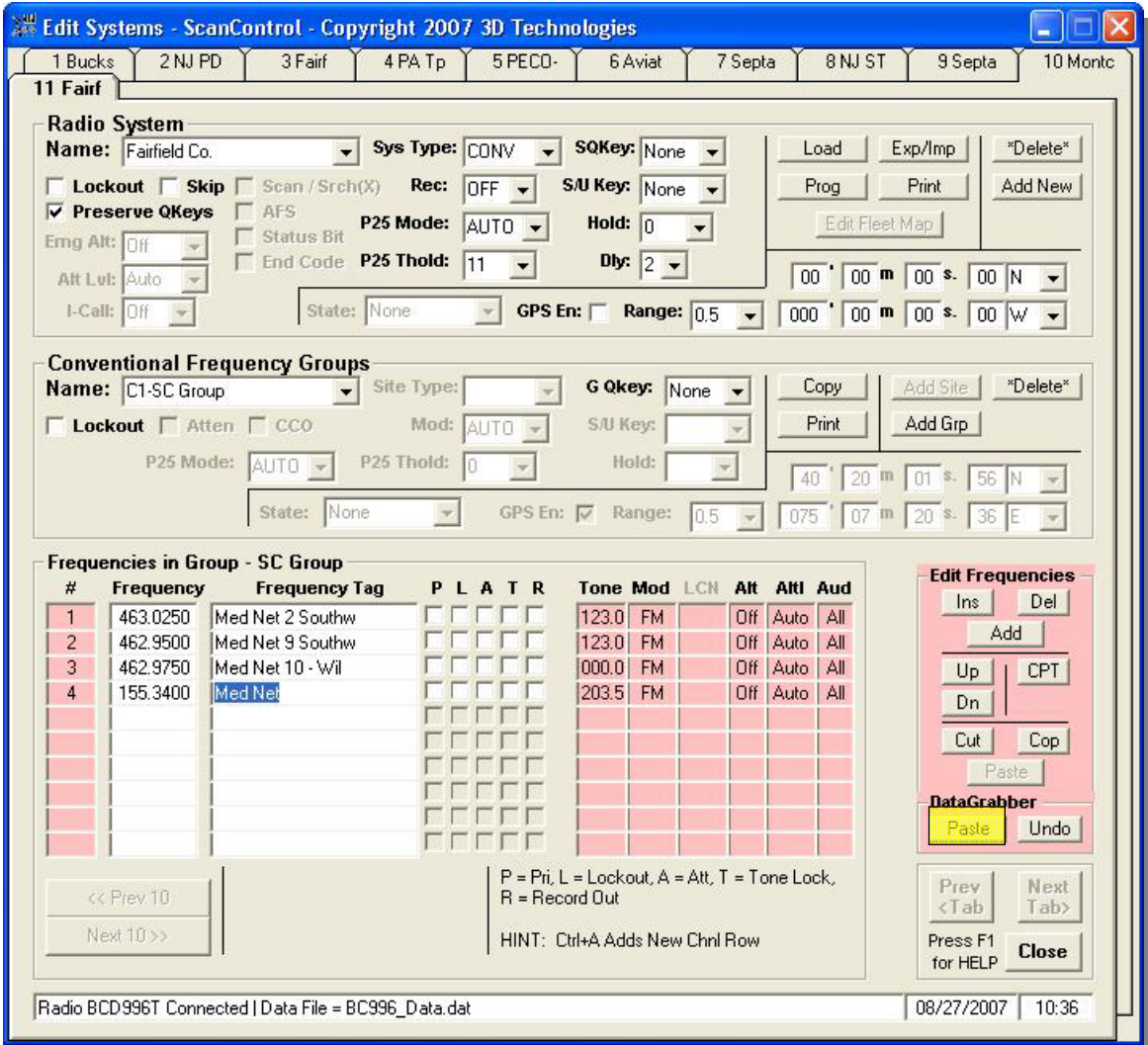
Figure 28 – DataGrabber:Conventional Frequencies

- **Multiple Group Copy / Paste**- If the user had "grabbed" multiple frequency groups on the RadioReference.com web page and pasted them starting with group #1 as above then the DataGrabber would have asked the user if he / she wanted to split the groups and paste them into the system as separate, named groups OR paste all the frequencies together in the one group.
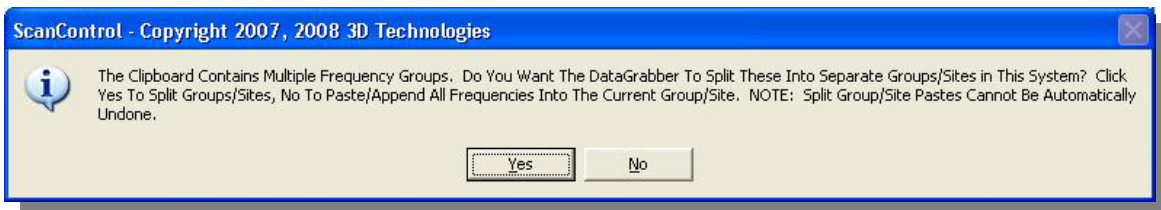
In a multiple group paste even the group names are brought over and assigned to the system group names during the paste.

- **Grabbing Trunk System Frequencies** – Trunk system frequencies are organized differently on RadioReference.com web pages. In a large trunk system they are organized by sites. A site is a specific transmitter location, usually identified by its location name, that transmits the radio system traffic on a specific set of frequencies. The system used in the example below has one site named "Primary" but a complex trunk system will have multiple sites. The DataGrabber is aware of the concept of a site and therefore can distinguish between each of the sites during the paste process.

Figure 29 – DataGrabber:Trunk System Frequencies

Highlight the desired rows of trunk system frequency data (see above) by dragging your mouse from the <u>upper left corner</u> of the row section to the <u>lower left corner</u> of the row section. Highlighting the field name row is optional in this type of copy. The DataGrabber knows these are trunk system frequencies. <u>Be sure to highlight entire rows of data</u> or the DataGrabber will ignore them. Depending on your browser you can then select Edit, Copy or type Ctrl + C or Ctrl + Ins to copy the data to the Windows clipboard. *NOTE: The highlighted area can span multiple "blocks" of data so in the example above you could have also highlighted additional site frequencies if configured in the system in one copy action. In fact you can highlight ALL the frequencies for the trunk system in one copy action.*

Open the ScanControl System Editor and create a new system or open to an existing system. **BE SURE TO CORRECTLY SET THE SYSTEM TYPE BEFORE ATTEMPTING THE PASTE / APPEND.** The DataGrabber can APPEND the frequency rows to the data already in the Group or PASTE the frequency rows over the data already in the Group. To APPEND the data just click the DataGrabber Append button. To PASTE the data click the Frequency Tag field of the row where you want the PASTE to start. The DataGrabber Append button label will change to read Paste then click the Paste button. *(NOTE: Your system editor may look slightly different than below depending on which model radio is in use.)*
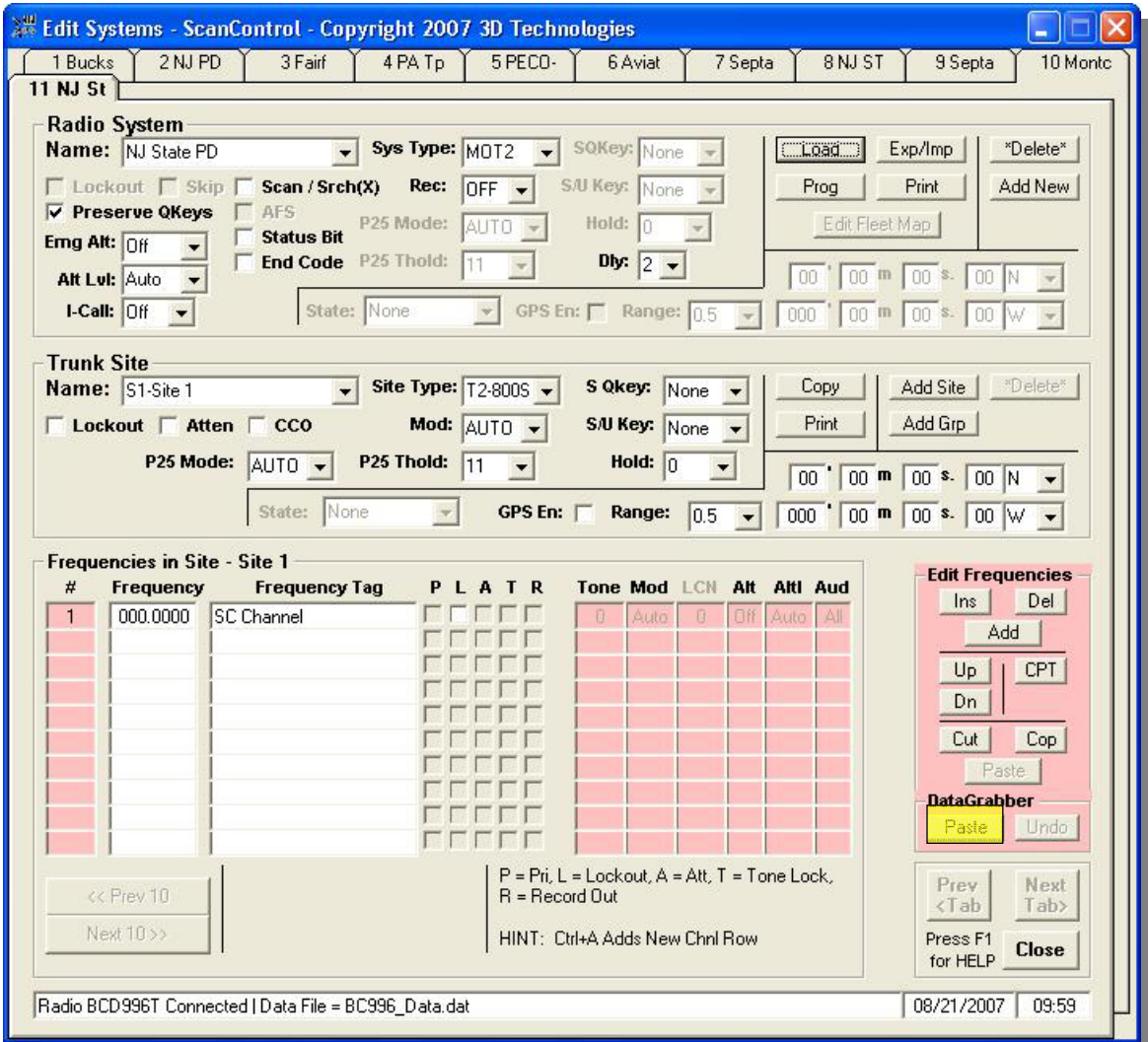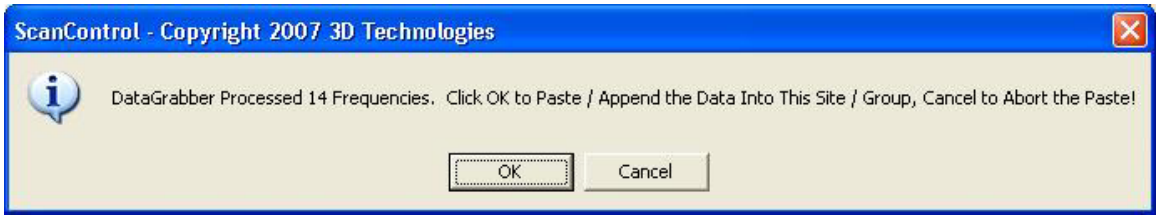

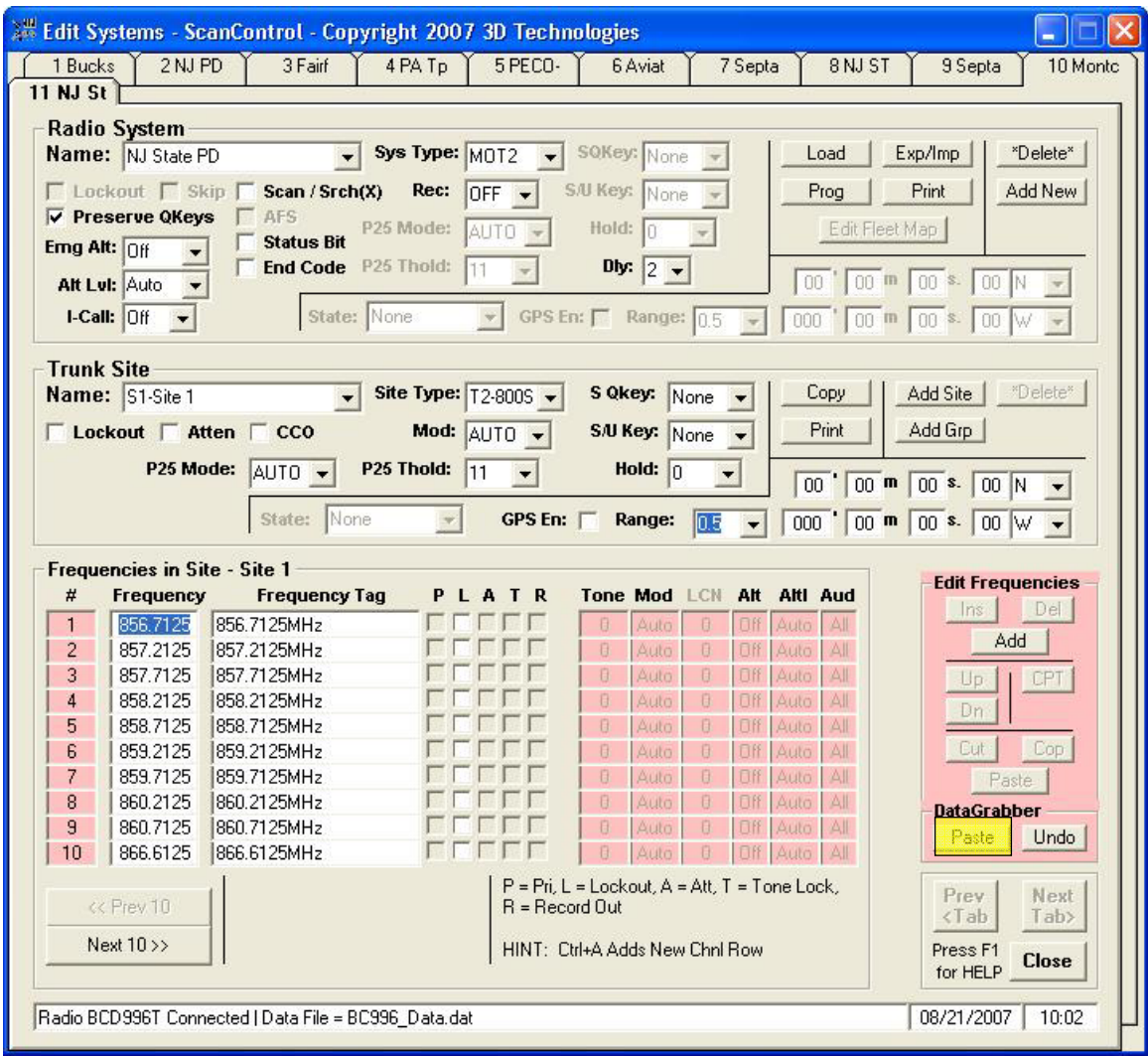**Figure 30 – DataGrabber:Trunk System Frequencies**

The DataGrabber will process the data rows and advise the user how many frequencies were found and processed. Clicking OK on the message screen will complete the Paste / Append. Clicking Cancel will abort the Paste / Append.

The DataGrabber has pasted the data rows (below), accounted for the frequency and defaulted the alpha tag. Note also the Undo button has become un-grayed after the Paste / Append. You can use the Undo button to reverse the Paste / Append action and return the Group data back to what it was before the Paste / Append.

Figure 31 – DataGrabber:Trunk System Frequencies

- **Multiple Site Copy / Paste –BC246T, BR330T, BCD396T** - These radios do not support the construct of a radio site. If you want to program multiple trunk system sites they have to be configured as separate SYSTEMS in the radio. The DataGrabber does this for you automatically AND permits you to reproduce all the Talkgroup IDs contained in the first system into all the

associated systems if you wish. It is for this reason you may want to "grab" all the Talkgroup IDs FIRST and paste them into the first system in the chain. Then, when you do a multiple site frequency copy and create all the associated systems all the Talkgroup IDs will also be reproduced. If the user had "grabbed" multiple frequency sites on the RadioReference.com web page and pasted them starting with System Frequency Group #1 as above then the DataGrabber would have asked the user if he / she wanted to split the sites and paste them into the editor as separate, named <u>SYSTEMS</u> OR paste all the frequencies together in the one System Frequency Group.
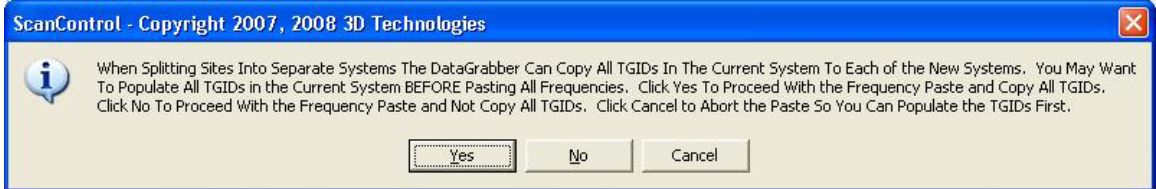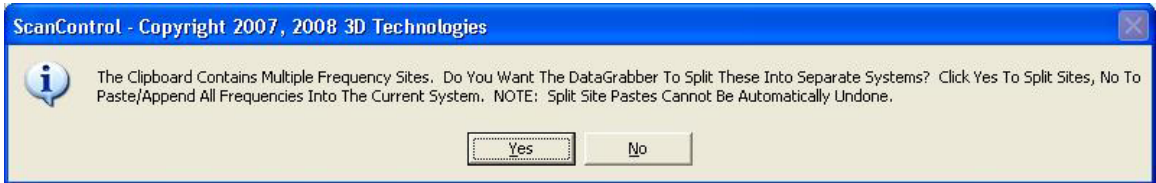
In a multiple site paste even the site names are brought over and assigned to the system names during the paste.

- **Multiple Site Copy / Paste – BCD996T, BCT15** - If the user had "grabbed" multiple frequency sites on the RadioReference.com web page and pasted them starting with site #1 as above then the DataGrabber would have asked the user if he / she wanted to split the sites and paste them into the system as separate, named sites OR paste all the frequencies together in the one site.
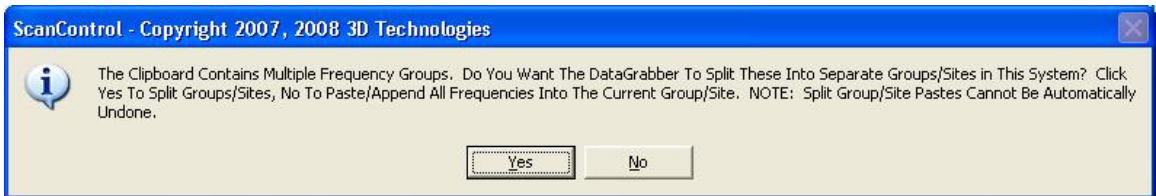
In a multiple site paste even the site names are brought over and assigned to the system site names during the paste.

- **Grabbing Trunk System Talkgroup IDs** – Trunk system Talkgroup IDs are displayed in several different formats on RadioReference.com. The DataGrabber is aware of this and compensates for it during the paste process. The copy / paste process for Talkgroup IDs, however, is the same.

Display the Talkgroup IDs on the RadioReference.com page in your browser. In the example below we are displaying one group of Talkgroup IDs but most trunk systems will have multiple groups on the page.

Figure 32 – DataGrabber Talkgroup IDs

Highlight the desired rows of TGID data (see above) by dragging your mouse from the upper left corner of the row section to the lower left corner of the row section. The DataGrabber needs to have the field name row ("DEC, HEX, Display, … etc.") in at least one of the copy steps on any given web page. Be sure to highlight entire rows of data or the DataGrabber will ignore them. Depending on your browser you can then select Edit, Copy or type Ctrl + C or Ctrl + Ins to copy the data to the Windows clipboard. ***NOTE: The highlighted area can span multiple "blocks"***

of data so in the example above you could have highlighted both the "Zone C3 Talkgroups" AND the adjacent zone talkgroups in one copy action. In fact you can highlight ALL the talkgroup IDs on the entire page for the entire system in one copy action.

Open the ScanControl System Editor and create a new Talkgroup ID group or open to an existing group. The DataGrabber can APPEND the TGID rows to the data already in the Group or PASTE the TGID rows over the data already in the Group. To APPEND the data just click the DataGrabber Append button. To PASTE the data click the TGID Tag field of the row where you want the PASTE to start. The DataGrabber Append button label will change to read Paste then click the Paste button. *(NOTE: Your system editor may look slightly different than below depending on which model radio is in use.)*
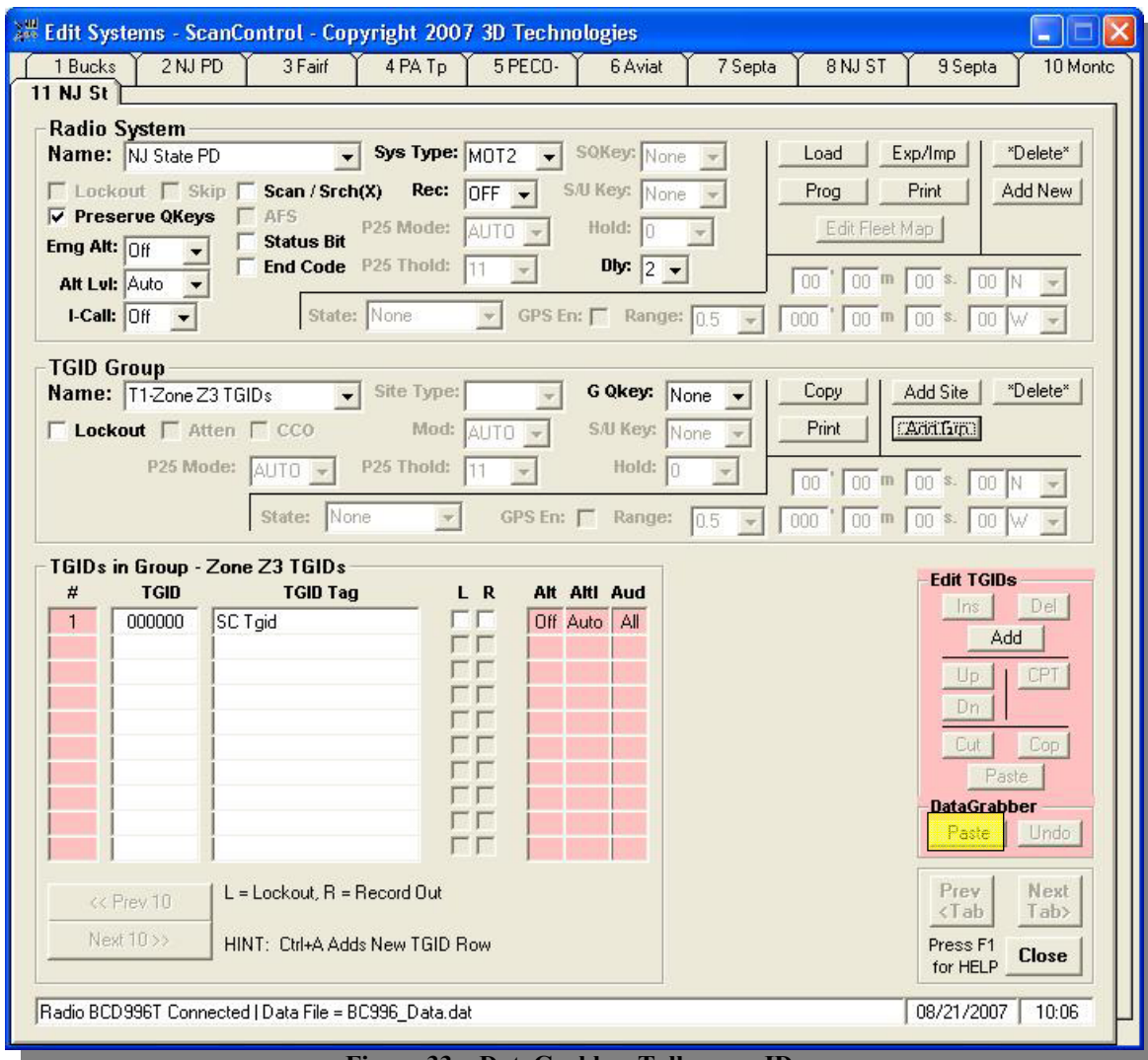
Figure 33 – DataGrabber Talkgroup IDs

The DataGrabber will process the data rows and advise the user how many Talkgroup IDs were found and processed.
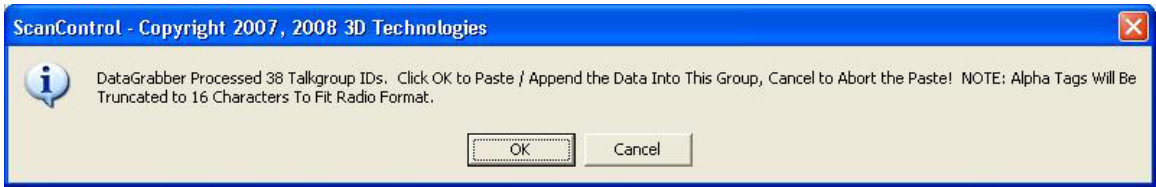
Clicking OK on the message screen will complete the Paste / Append. Clicking Cancel will abort the Paste / Append.

The DataGrabber has pasted the data rows (below) accounting for the Talkgroup ID and the alpha tag. The alpha tag has been truncated to the maximum of 16 characters supported in the radio. Note also the Undo button has become un-grayed after the Paste / Append. You can use the Undo button to reverse the Paste / Append action and return the Group data back to what it was before the Paste / Append.
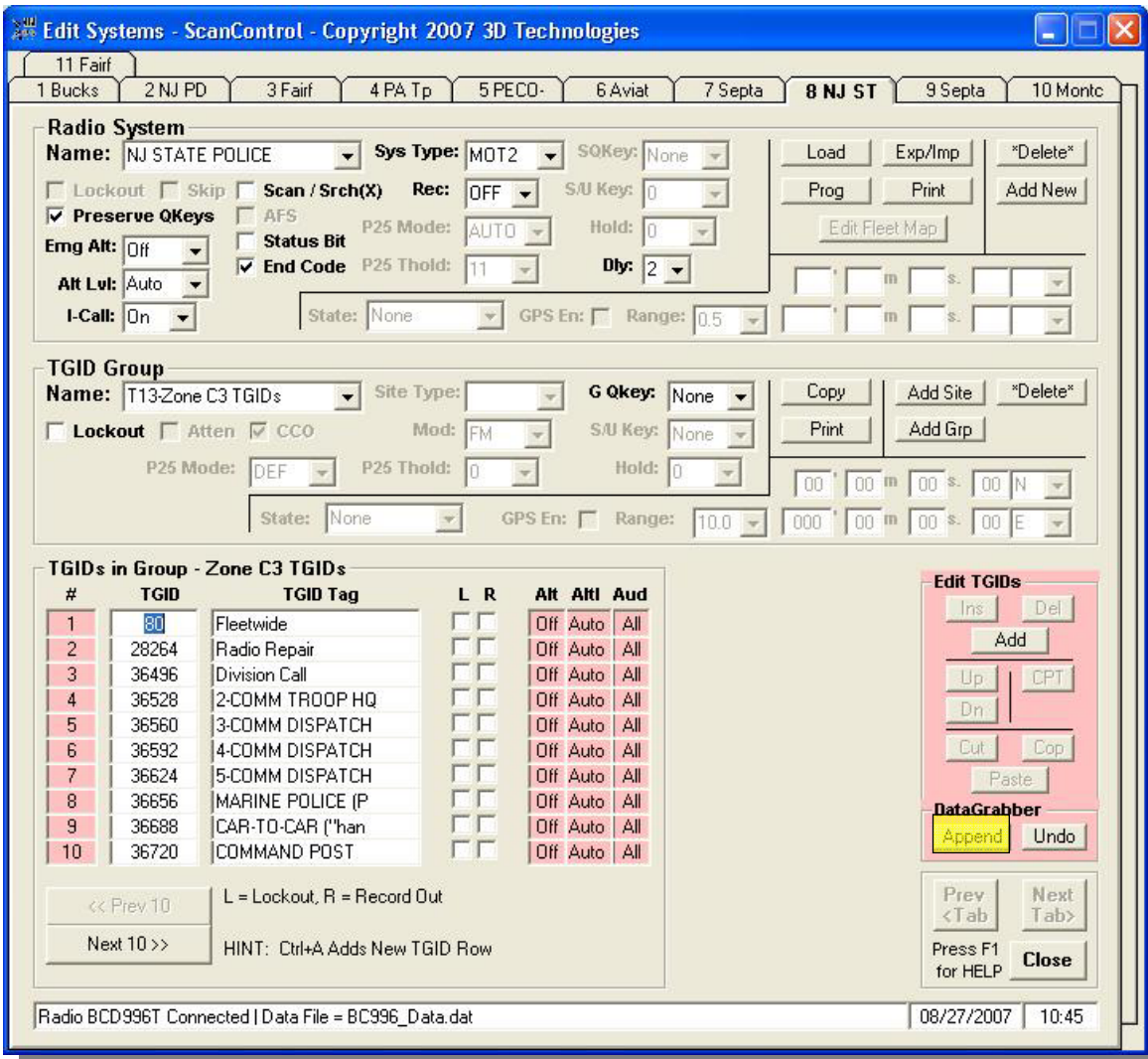
Figure 34 – DataGrabber Talkgroup IDs

- **Multiple Talkgroup ID Group Copy / Paste** - If the user had "grabbed" multiple Talkgroup ID groups on the RadioReference.com web page and pasted them starting with group #1 as above then the DataGrabber would have asked the user if he / she wanted to split the groups and paste them into the system as separate, named groups OR paste all the Talkgroup IDs together in the one group.
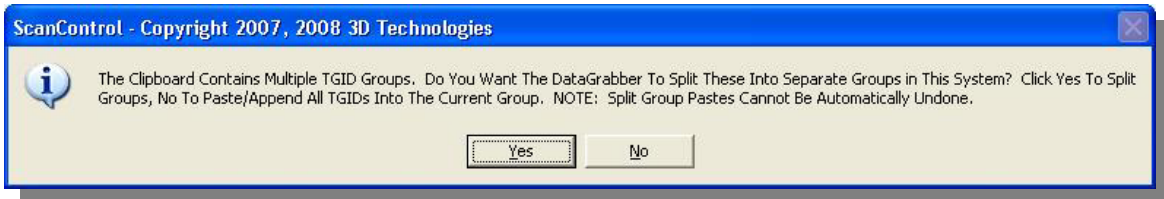
ScanControl - Copyright 2007, 2008 3D Technologies

The Clipboard Contains Multiple TGID Groups. Do You Want The DataGrabber To Split These Into Separate Groups in This System? Click Yes To Split Groups, No To Paste/Append All TGIDs Into The Current Group. NOTE: Split Group Pastes Cannot Be Automatically Undone.

Yes   No

In a multiple group paste even the group names are brought over and assigned to the system group names during the paste.

Import CSV File Data Screen

The Import CSV File Data Screen is a powerful feature of the ScanControl data import capabilities. This screen allows the user to view the rows and columns in a CSV file produced by Excel, or any other ASCII text program, and designate which rows and columns are to be imported into ScanControl. The user can select what type of data is contained in the columns of the file: Frequencies, Talkgroup IDs or Both.. Once the data is imported into the destination system it can then be directly programmed into the radio and saved as part of the ScanControl data file. *NOTE: Before a CSV Import can be performed the destination system must already exist in ScanControl Memory. If you are importing into a new system use the "Add New" button on the Systems Edit screen to create an empty system for the CSV Import.*

Figure 35 - CSV File Import Screen
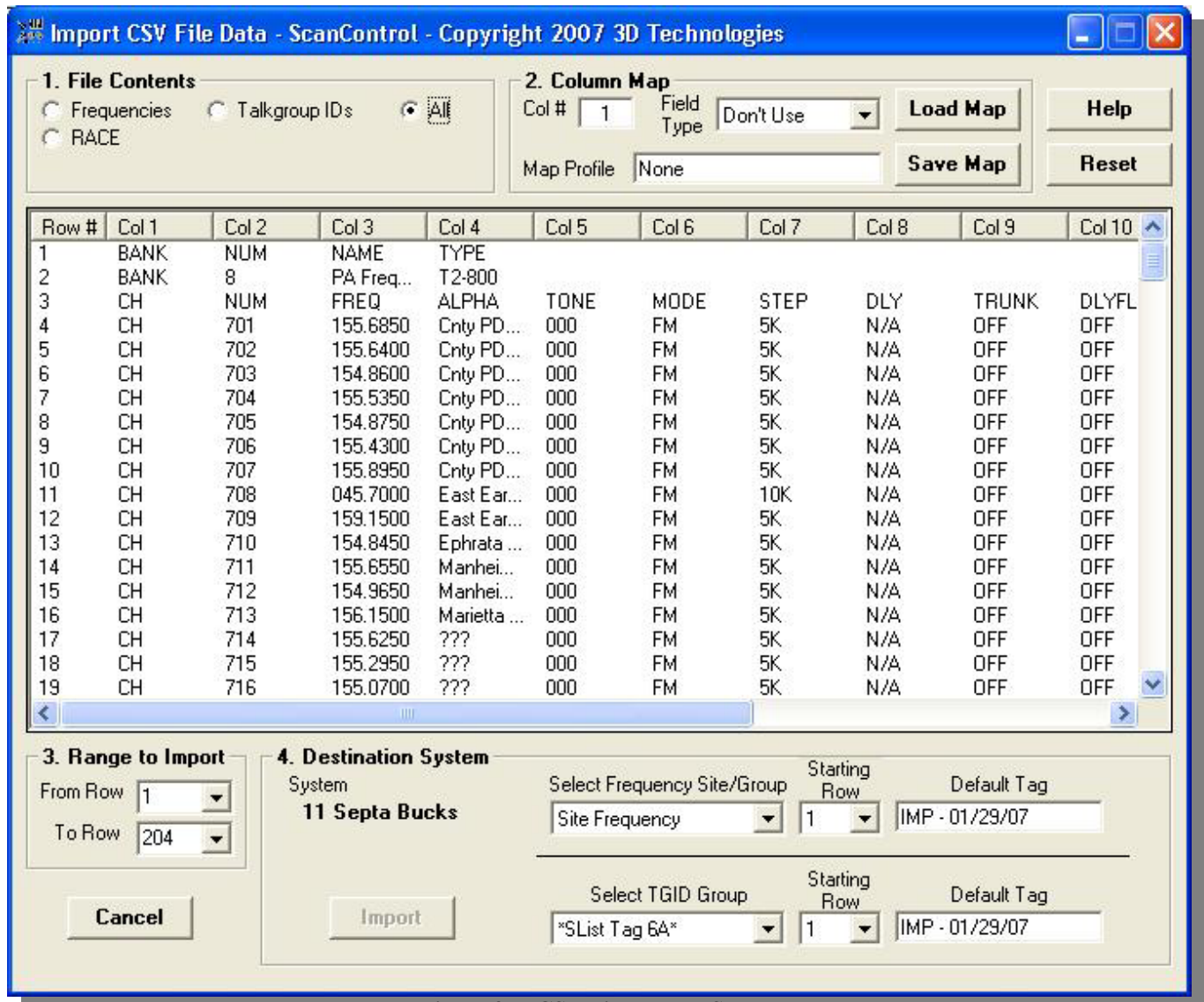
- **1. File Contents:**

- o **Frequencies** – Click to tell ScanControl the CSV file contains only Frequencies to be imported.
- o **Talkgroup IDs** – Click to tell ScanControl the CSV file contains only Talkgroup IDs to be imported.
- o **RACE** – Click to tell ScanControl the CSV file contains "RACE" system frequencies. This invokes the special Group sort that places each Driver's frequencies into their own Group.
- o **All** - Click to tell ScanControl the CSV file contains both Frequencies and Talkgroup IDs to be imported
- **2. Column Map:** Column "mapping" is the act of telling ScanControl what type of data appears in which columns of the CSV file. Only one column in the file can be assigned each Field Type for any given import. However, you can perform multiple imports from the same file as many times as necessary in order to get all the data you want from the file. ScanControl supports the ability to save a set of mapping parameters on your hard disk in a file known as a Map Profile. You can create and save as many Map Profiles as you want and then load them from disk to use repeatedly as often as you wish.
    - o **Column Header Bar** – Click on the column header of the column containing the data you want to map. The column number then appears in the Col # box.
    - o **Col #** - The number of the column being "mapped".
    - o **Field Type** – Select the type of data the column contains. The field type replaces the column number in the Column Header Bar.
    - o **Load Map** – Click to load an existing Map Profile from the PC hard disk.
    - o **Save Map** – Click to save the current Map Profile to the PC hard disk.
    - o **Map Profile** – The name of the currently loaded Map Profile.
- **3. Range to Import:** The user needs to tell ScanControl how many of the rows in the CSV file are to be imported. The From Row and To Row list boxes are filled with the total number of rows in the file when the file is loaded. In the sample screen above rows 1 through 36 are selected to be imported.
    - o **From Row** – Select the first row of data in the file to be imported.
    - o **To Row** – Select the last row of data in the file to be imported.
- **4. Destination System:**
    - o **System** –The destination system is the currently selected system in the System Editor.
    - o **Select Frequency Site/Group** – If importing frequencies, select the Frequency Group or Site from the list of available frequency groups / sites in the selected system. The last choice in the list is "New". This allows you to create a new frequency group or site in the system directly from the CSV Import screen.
    - o **Starting Row** – Select the starting row number for the import. This list box is automatically filled with the available rows based on the group selected but also contains the choice "New" at the bottom of the list. This allows you to append new rows on the end of the selected group.
    - o **Def Tag (Frequencies)** – If no Frequency Tag column is identified for importation this field allows the user to set a default alphanumeric tag for all the imported frequencies.
    - o **Select TGID Group** – If importing talkgroup IDs, select the TGID Group from the list of available TGID groups in the selected system. The last choice in the list is "New". This allows you to create a new TGIDgroup in the system directly from the CSV Import screen.

- o **Starting Row** - Select the starting row number for the import. This list box is automatically filled with the available rows based on the group selected but also contains the choice "New" at the bottom of the list. This allows you to append new rows on the end of the selected group.
- o **Def Tag (Talkgroups)** – If no Talkgroup Tag column is identified for importation this field allows the user to set a default alphanumeric tag for all the imported Talkgroup IDs.
- **Operation Controls:**
  - o **Help Button** – Click to open this Help file.
  - o **Reset Button** – Click to reset all settings on the screen back to their defaults.
  - o **Cancel Button** – Click to cancel the CSV Import and return to the Import Data Screen.
  - o **Import Button** – Click to perform the data import. ScanControl will alert the user that data may be overwritten by performing the import.

Edit Custom Search Ranges Screen

The Edit Custom Search Ranges Screen allows programming and loading of the 10 Custom Search Ranges found in the SC230, BC246T, BR330T, BCD396T, BCT15 and BCD996T. These values are stored in the ScanControl Memory Area and saved in the ScanControl data file. This screen performs two functions: 1) It loads and programs the Custom Search Range values to and from the radio AND it 2) activates and deactivates each Custom Search Range in real time through the use of the "Act" checkboxes in the far left column. This screen will appear slightly different than the screen shot below depending on which radio is connected. Any settings that are not available in a particular radio will be grayed out.
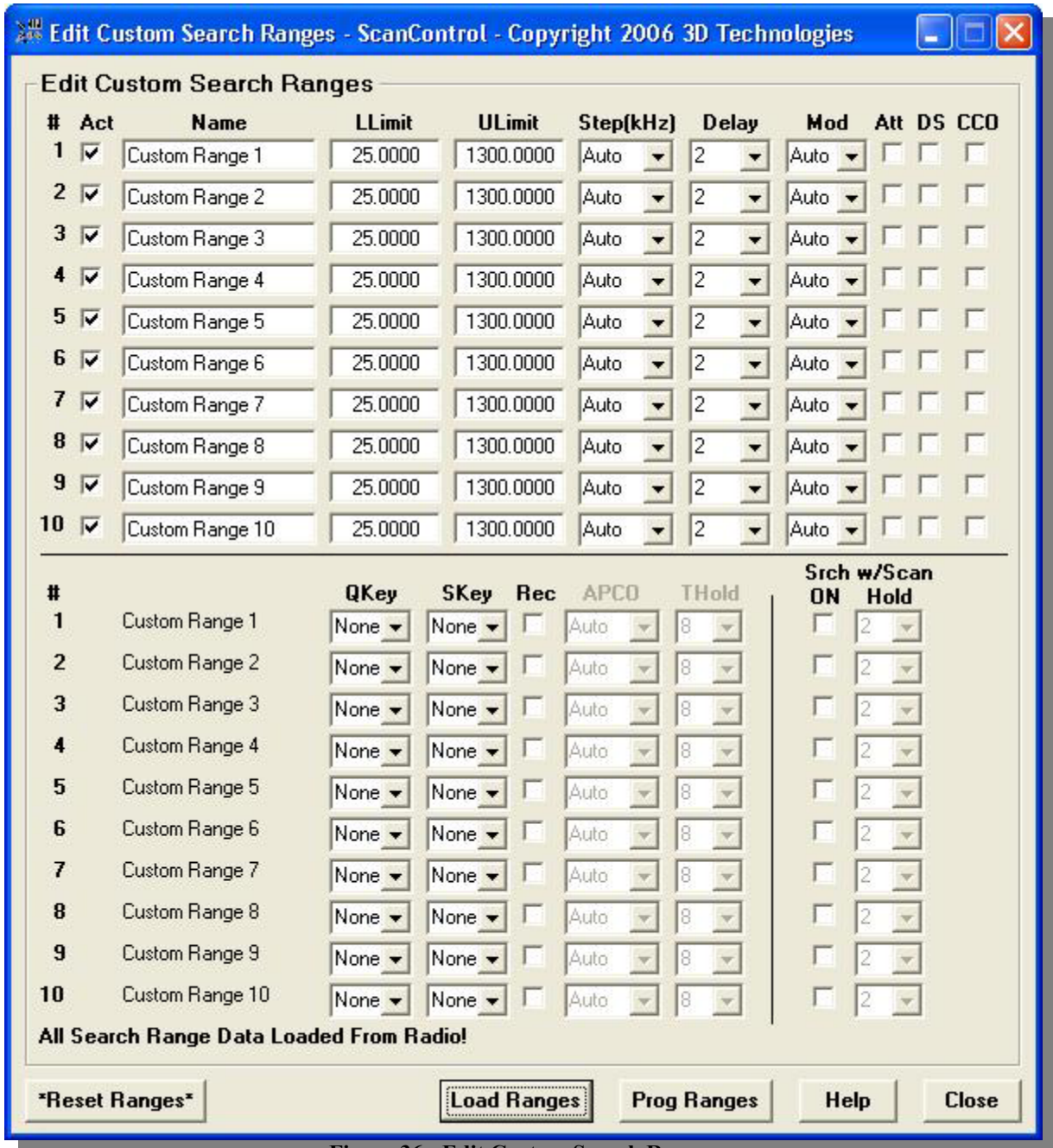
Figure 36 - Edit Custom Search Ranges

- **#** – The Custom Search Range number being edited. These values are fixed and cannot be changed.
- **Act** – Checkbox to activate or deactivate the search range. When a box is checked or unchecked the radio is immediately updated in real time. NOTE: There must always be one search range active so if you try to uncheck all 10 ranges the radio will automatically activate range #1 and the status back from the radio will reflect this.
- **Name** – The alphanumeric name assigned to the search range. The first 16 characters of this string are stored in the radio when the search ranges are programmed.
- **Lower Limit** – The Lower Limit frequency for the search range.

- **Upper Limit** – The Upper Limit frequency for the search range.
- **Step (kHz)** – The frequency step size for the search range. You can choose from the list of available steps or select Auto to have the radio select the step.
- **Delay** – The delay value (in seconds) for the search range.
- **Mod** – The reception mode (modulation) for the search range. You can choose from the list of available modes or select Auto to have the radio select the mode.
- **Att** – Checkbox to turn on or off Attenuation for each search range.
- **DS** – Checkbox to turn on or off Data Skip for each search range.
- **CCO -** Checkbox to turn on or off Control Channel Only mode for each search range.
- **QKey (BCT15, BCD996T Only)** – Drop down list box to select the Quick Key # for the selected search range.
- **S/UKey (BCT15, BCD996T Only)** - Drop down list box to select the Start Up Key # for the selected search range.
- **Rec -** Checkbox to turn on or off Record Out mode for each search range.
- **APCO** – Drop down list to select APCO Threshold mode: AUTO, MAN or DEFAULT for each search range.
- **THold** – Drop down list to select the APCO Threshold value (0 – 63) for each search range.
- **Srch w/Scan ON** – Checkbox to turn on or off Search with Scan mode for each search range.
- **Srch w/Scan Hold** – Drop down list to select the Hold time (in seconds) for Search with Scan hold for each search range.
- **Operations Controls**
  - **Load Ranges** – Loads all 10 search ranges from the scanner's radio memory into the ScanControl Memory Area.
  - **Prog Ranges** – Programs all 10 search ranges into the scanner's radio memory.
  - **Reset Ranges** – Resets all 10 search ranges to their default settings in the ScanControl Memory Area. *NOTE: This function DOES NOT clear the data for the custom search ranges in the scanner's radio memory.*
  - **Help Button** - Click to open this Help file.
  - **Close Button** – Click to close the Edit Custom Search Ranges Screen and return to the Main Control Screen.

Edit Service Search Settings Screen (BR330T, BCT396T, BCT15, BCD996T)

The Edit Service Search Settings Screen allows programming and loading of the Service Search Range Settings found in the BR330T, BCD396T, BCT15 and BCD996T. These values are stored in the ScanControl Memory Area and saved in the ScanControl data file. This screen will appear slightly different than the screen shot below depending on which radio is connected. Any settings that are not available in a particular radio will be grayed out.
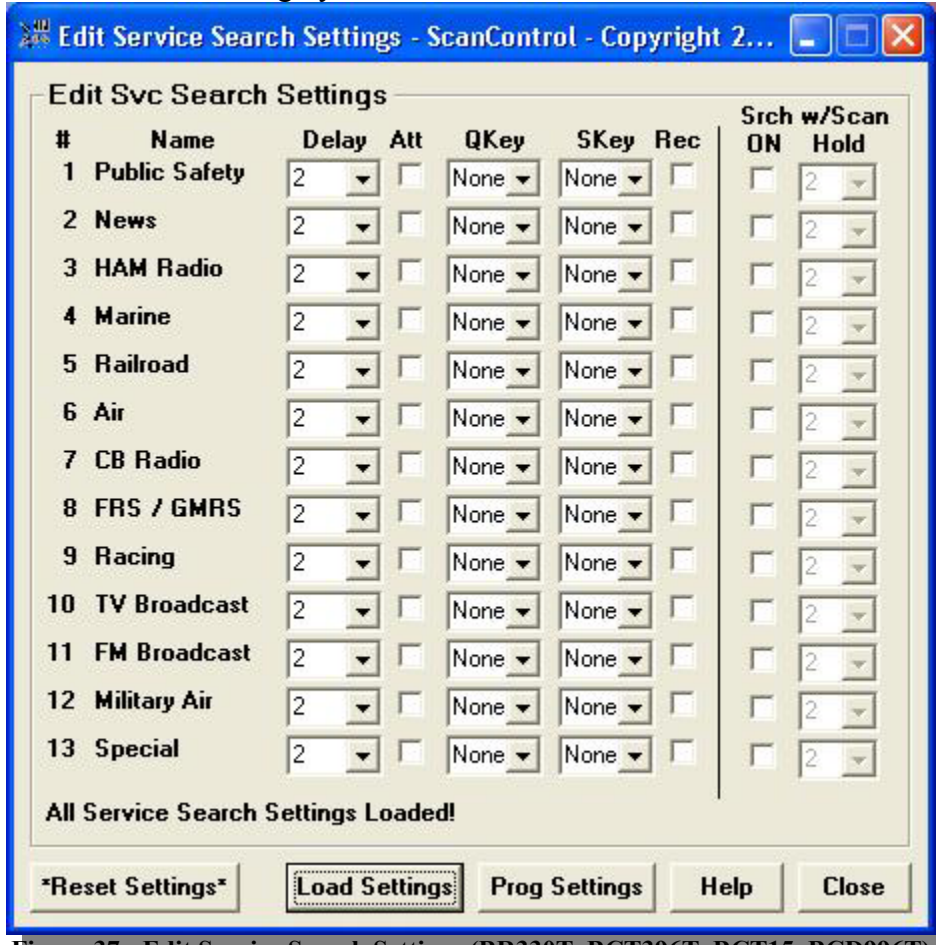

Figure 37 - Edit Service Search Settings (BR330T, BCT396T, BCT15, BCD996T)

- **#** – The Service Search Range number being edited. These values are fixed and cannot be changed.
- **Name** – The alphanumeric name of the service search range. These values are fixed and cannot be changed and may differ by radio.
- **Delay** – The delay value (in seconds) for each service search range.
- **Att** – Checkbox to turn on or off Attenuation for each service search range.
- **QKey (BCT15, BCD996T Only)** – Drop down list box to select the Quick Key # for the selected service search range.
- **S/UKey (BCT15, BCD996T Only)** - Drop down list box to select the Start Up Key # for the selected service search range.
- **Rec -** Checkbox to turn on or off Record Out mode for each service search range.

- **Srch w/Scan ON** – Checkbox to turn on or off Search with Scan mode for each service search range.
- **Srch w/Scan Hold** – Drop down list to select the Hold time (in seconds) for Search with Scan hold for each service search range.
- **Operations Controls**
  - o **Load Settings** – Loads all service search range settings from the scanner's radio memory into the ScanControl Memory Area.
  - o **Prog Settings** – Programs all service search range settings into the scanner's radio memory.
  - o **Reset Settings** – Resets all service search range settings to their default settings in the ScanControl Memory Area. *NOTE: This function DOES NOT clear the data for the service search range settings in the scanner's radio memory.*
  - o **Help Button** - Click to open this Help file.
  - o **Close Button** – Click to close the Edit Service Search Settings Screen and return to the Main Control Screen.

Edit Tone Out Settings Screen (BR330T, BCT396T, BCT15, BCD996T)

The Edit Tone Out Settings Screen allows programming and loading of the 10 Tone Out Settings found in the BR330T, BCD396T, BCT15 and BCD996T. These values are stored in the ScanControl Memory Area and saved in the ScanControl data file. This screen will appear slightly different than the screen shot below depending on which radio is connected. Any settings that are not available in a particular radio will be grayed out.
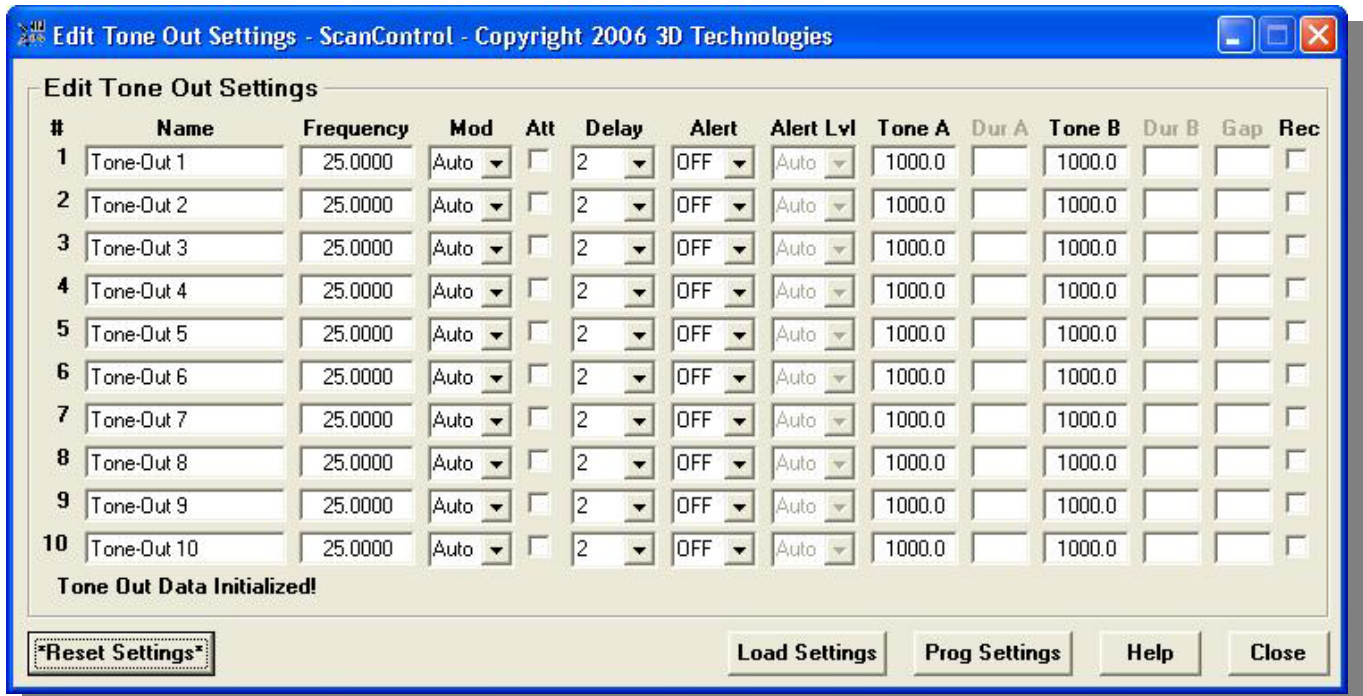
#	Name	Frequency	Mod	Att	Delay	Alert	Alert Lvl	Tone A	Dur A	Tone B	Dur B	Gap	Rec
1	Tone-Out 1	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐
2	Tone-Out 2	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐
3	Tone-Out 3	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐
4	Tone-Out 4	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐
5	Tone-Out 5	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐
6	Tone-Out 6	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐
7	Tone-Out 7	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐
8	Tone-Out 8	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐
9	Tone-Out 9	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐
10	Tone-Out 10	25.0000	Auto	☐	2	OFF	Auto	1000.0		1000.0			☐

Tone Out Data Initialized!

Reset Settings   Load Settings   Prog Settings   Help   Close

Figure 38 - Edit Tone Out Settings (BR330T, BCT396T, BCT15, BCD996T)

- **#** – The Tone Out setting number being edited. These values are fixed and cannot be changed.

- **Name** – The alphanumeric name assigned to the tone out settings. The first 16 characters of this string are stored in the radio when the search ranges are programmed.
- **Frequency** – The frequency setting for the tone out.
- **Mod** – The reception mode (modulation) for the tone out. You can choose from the list of available modes or select Auto to have the radio select the mode.
- **Att** – Checkbox to turn on or off Attenuation for each tone out.
- **Delay** – The delay value (in seconds) for the tone out.
- **Alert** – The Alert value (OFF, 1 – 9) for the tone out.
- **Alert Lvl** – The Alert Level (AUTO, 1 – 15) for the tone out.
- **Tone A** – The Tone A audible frequency (in Hz) for the tone out.
- **Dur A** – Not yet implemented in BR330T or BCD396T.
- **Tone B** – The Tone B audible frequency (in Hz) for the tone out.
- **Dur B** – Not yet implemented in BR330T or BCD396T.
- **Gap** - Not yet implemented in BR330T or BCD396T.
- **Rec -** Checkbox to turn on or off Record Out mode for each tone out.
- **Operations Controls**
  - **Load Settings** – Loads all 10 tone out settings from the scanner's radio memory into the ScanControl Memory Area.
  - **Prog Settings** – Programs all 10 tone out settings into the scanner's radio memory.
  - **Reset Settings** – Resets all 10 tone out settings to their default settings in the ScanControl Memory Area. ***NOTE: This function DOES NOT clear the data for the tone out settings in the scanner's radio memory.***
  - **Help Button** - Click to open this Help file.
  - **Close Button** – Click to close the Edit Custom Search Ranges Screen and return to the Main Control Screen.

Edit Location Alerts Settings Screen (BCT15, BCD996T)

The Edit Location Alerts Settings Screen allows programming and loading of GPS Location Alerts used in the BCT15 and BCD996T. These values are stored in the ScanControl Memory Area and saved in the ScanControl data file. Location Alerts are specific geographic locations you program into the scanner that are then used during GPS scanning mode. The scanner signals an alert (audible tone) when the GPS interface tells the scanner the vehicle is within the location parameters as defined in the Location Alert data.
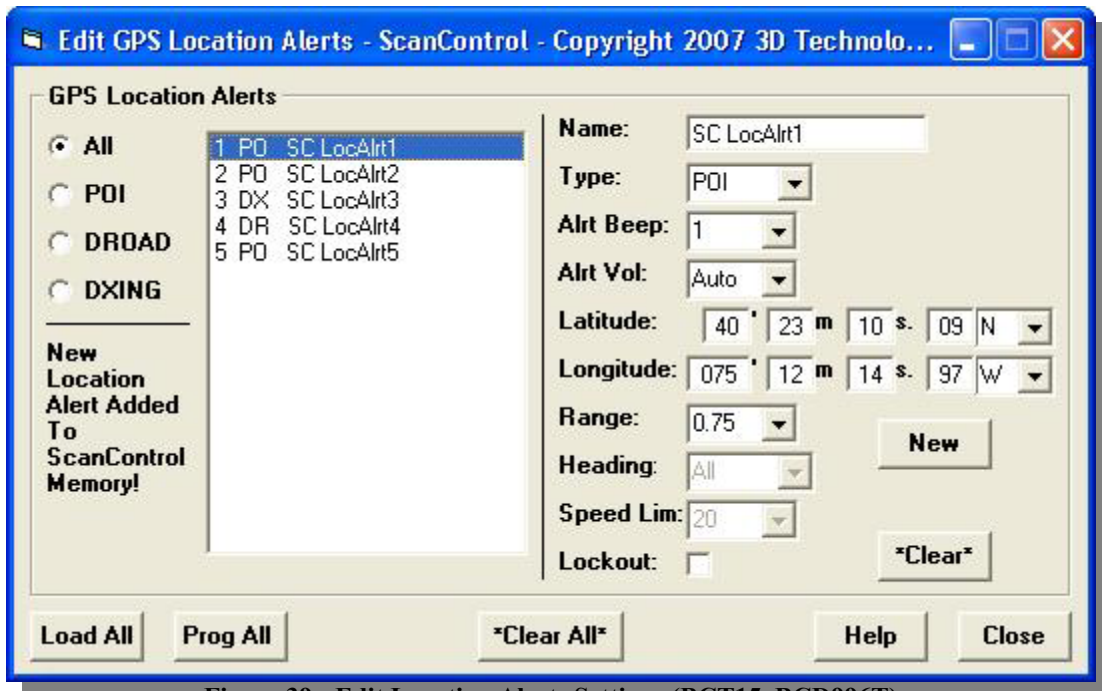
Figure 39 - Edit Location Alerts Settings (BCT15, BCD996T)

- **All, POI, DROAD, DXING** – The type of Location Alert being displayed in the current alert list. POI = Point of Interest, DROAD = Dangerous Road, DXING = Dangerous Crossing.
- **Name** – The alphanumeric name assigned to the Location Alert. The first 16 characters of this string are stored in the radio when the Location Alerts are programmed.
- **Type** – The type of Location Alert.
- **Alrt Beep** – The Alert value (OFF/1 – 4 for POI, OFF/ON for DROAD & DXING) for the alert audible tone.
- **Alrt Vol** – The Alert Level (AUTO, 1 – 15) for the alert audible tone.
- **Latitude** – The Latitude of the Location Alert location.
- **Longitude** – The Longitude of the Location Alert location.
- **Range** – The distance (in miles) from which the alert audible tone is to sound when the vehicle is approaching the location.
- **Heading** – The direction from which the vehicle is approaching the location within which the alert tone is to sound.
- **Speed Lim** – The speed threshold for sounding the alert tone.
- **Lockout** – Checkbox to lockout (disable) the Location Alert.
- **New Button** – Add a new Location Alert to the list.
- ***Clear* Button** – Clear (delete) the currently selected Location Alert from the list.
- **Operations Controls**
  - **Load All Button –** Load all Location Alerts from the scanner.
  - **Prog All Button** – Programs all Location Alerts into the scanner's radio memory.
  - ***Clear All* Button** – Clears (deletes) all Location Alerts from the ScanControl Memory Area AND optionally from the scanner's radio memory.
  - **Help Button** - Click to open this Help file.

     o **Close Button** – Click to close the Edit Location Alerts Screen and return to the Main Control Screen.

Edit Weather / SAME Settings Screen

The Edit Weather / SAME Settings Screen allows setting of the Weather Alert parameters in the radio and programming and loading of the 5 S.A.M.E. weather alert settings found in the SC230, BC246T, BR330T, BCD396T, BCT15 and BCD996T. These values are stored in the ScanControl Memory Area and saved in the ScanControl data file. This screen will appear slightly different than the screen shot below depending on which radio is connected. Any settings that are not available in a particular radio will be grayed out.
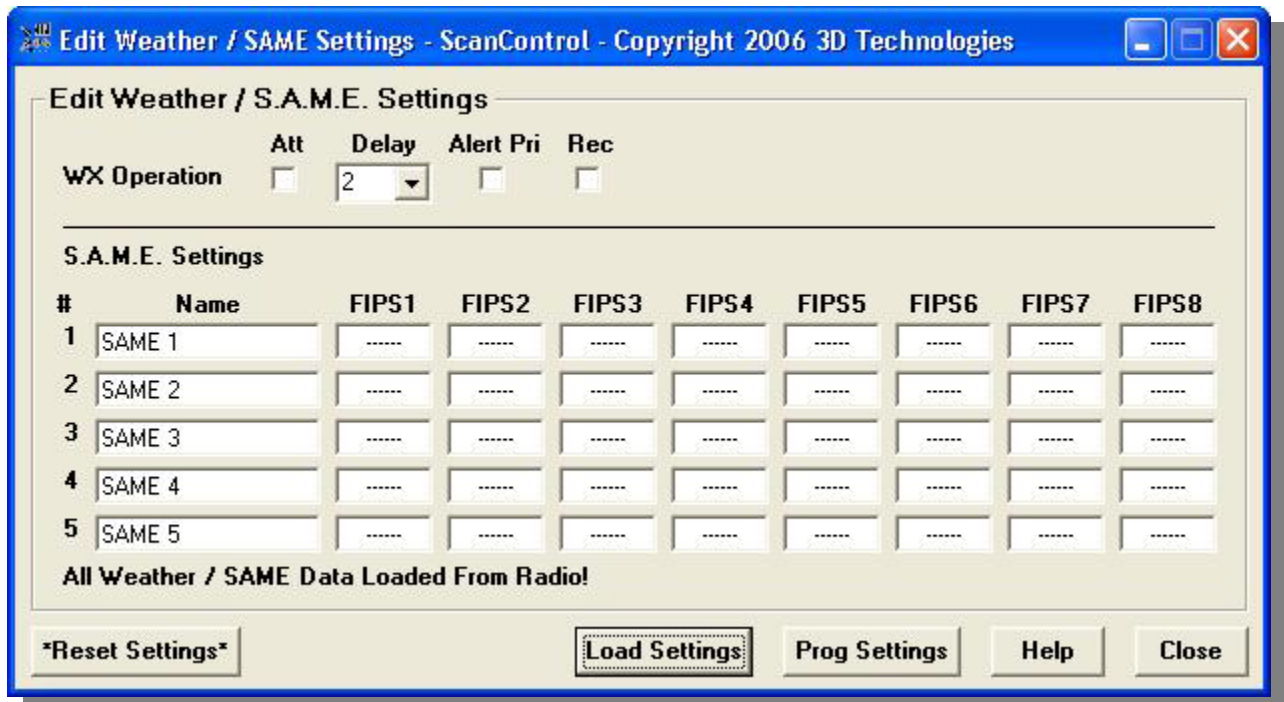
Figure 40 - Edit Weather / SAME Settings

- **WX Att** – Checkbox to turn on or off Attenuation for weather alert.
- **WX Delay** – Drop down list to select a delay value (in seconds) for weather alert.
- **WX Alert Pri** – Checkbox to turn on or off Priority mode for weather alert.
- **Rec -** Checkbox to turn on or off Record Out mode for weather alerts.
- **#** – The SAME Alert number being edited. These values are fixed and cannot be changed.
- **Name** – The alphanumeric name of the SAME Alert.
- **FIPS1 – FIPS8** – The FIPS Code values for each of the SAME Alerts.
- **Operations Controls**
    - **Load Settings** – Loads all weather alert settings from the scanner's radio memory into the ScanControl Memory Area.
    - **Prog Settings** – Programs all weather alert settings into the scanner's radio memory.

- o **Reset Settings** – Resets all weather alert settings to their default settings in the ScanControl Memory Area. *NOTE: This function DOES NOT clear the data for the weather alert settings in the scanner's radio memory.*
- o **Help Button** - Click to open this Help file.
- o **Close Button** – Click to close the Edit Service Search Settings Screen and return to the Main Control Screen.

- o **Select System** – Displays a drop down list of all trunk systems in the radio for selection. When adding a TGID to the lockouts list the user must tell the radio which system to add the TGID lockout into.
- o **Enter TGID**- Field for entering a new TGID to be added to the lockout list.
- o **Add** – Button to add the TGID in the TGID field to the system in the TGID Lockouts list.
- o **Remove** – Button to remove the selected TGID from the system in the TGID Lockouts list. The TGID to be removed is selected by clicking on the L/O# of the item in the list.
- o **Clear List** - Clears (removes all) the items in the TGID Lockouts list.
- **Operational Controls** –
  - o **Refresh** – Re-loads all lockouts from the radio.
  - o **Help**- Opens the Help screen.
  - o **Close** – Closes the Radio Lockouts screen.

Radio Control / Monitor Screens

(SC230, BC246T, BR330T, BCT396T, BCT15, BCD996T)

The Radio Control / Monitor Screen is designed to allow real time control of the SC230, BC246T, BR330T, BCD396T and BCD996T through a simulated keypad / display mechanism while also providing extensive additional information about active frequencies or Talkgroup IDs. The screen also supports a Scan / Search Hit logging capability that can produce CSV file format lists directly from the log. The ScanControl Control / Monitor Screen supports all modes and status indicators found in the SC230, BC246T, BR330T, BCD396T, BCT15 and BCD996T. *The ScanControl Control / Monitor Screen is only available in the Full version of the software. See our Web Site at http://www.scannersoft.com for details.*

BASIC OPERATION – The Radio / Control Monitor screen is meant to replace the use of the radio's keypad and LCD display. All keypad operations can be performed directly on the Keypad section of the Radio / Control Monitor screen in real time. The ScanControl application transfers the keypad input directly to the radio and the radio responds to the commands as if you were pressing on the keypad keys. The radios' LCD display is presented back to the ScanControl application through the radio display section of the screen. (See the screen shots below.)
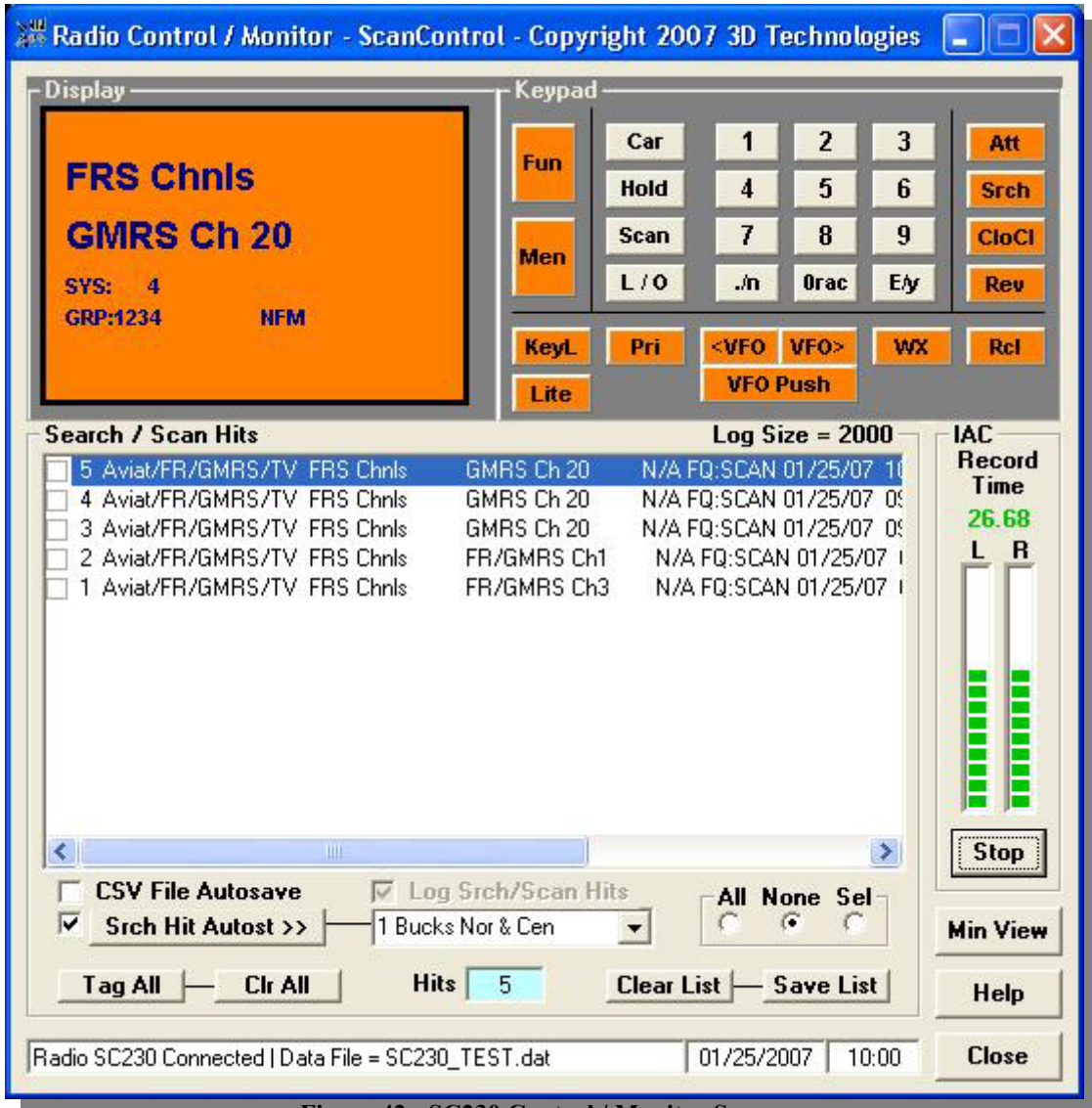
Figure 42 - SC230 Control / Monitor Screen

** See Screen Function descriptions below Figure 46.
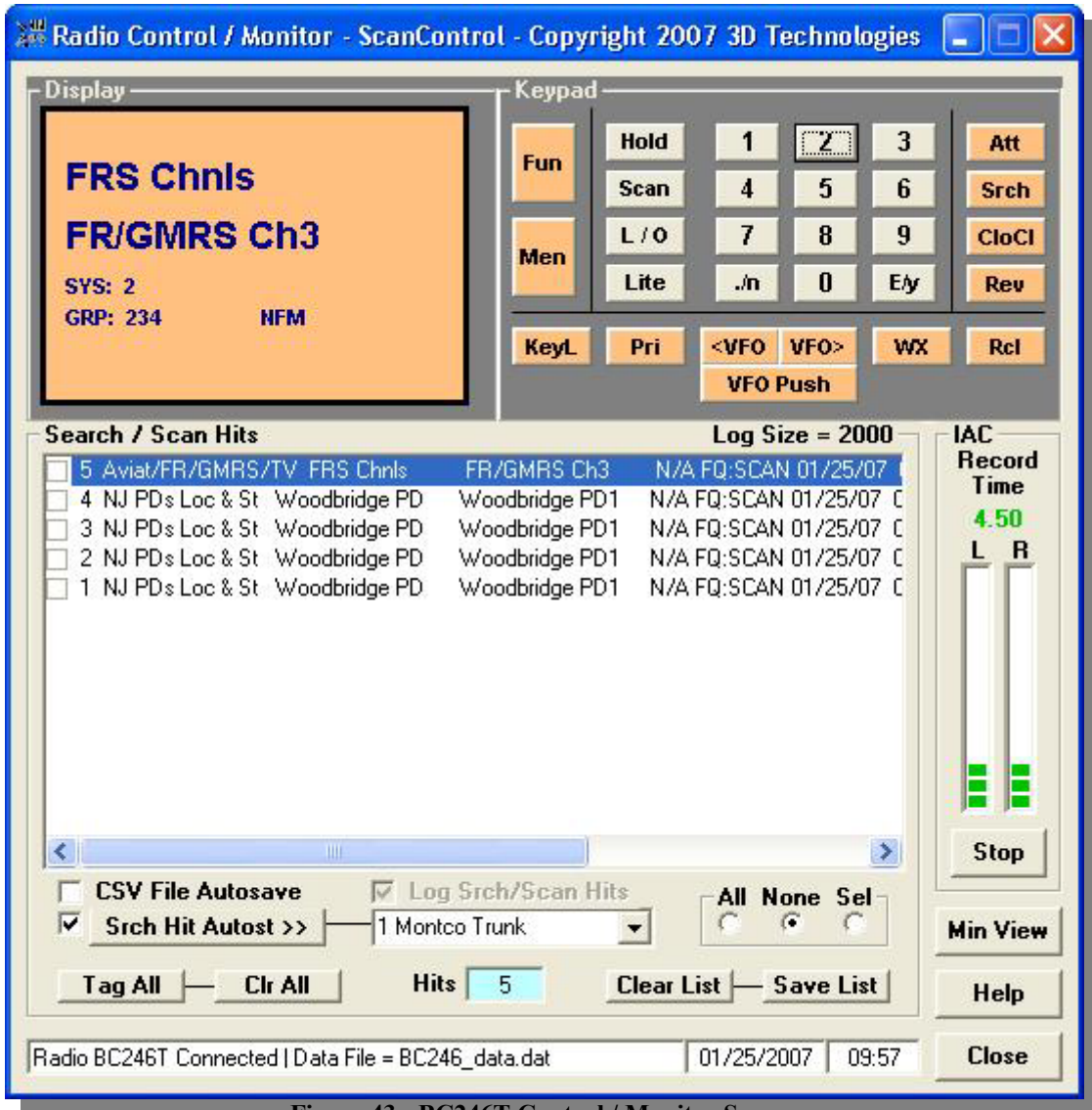
Figure 43 - BC246T Control / Monitor Screen

** See Screen Function descriptions below Figure 46.
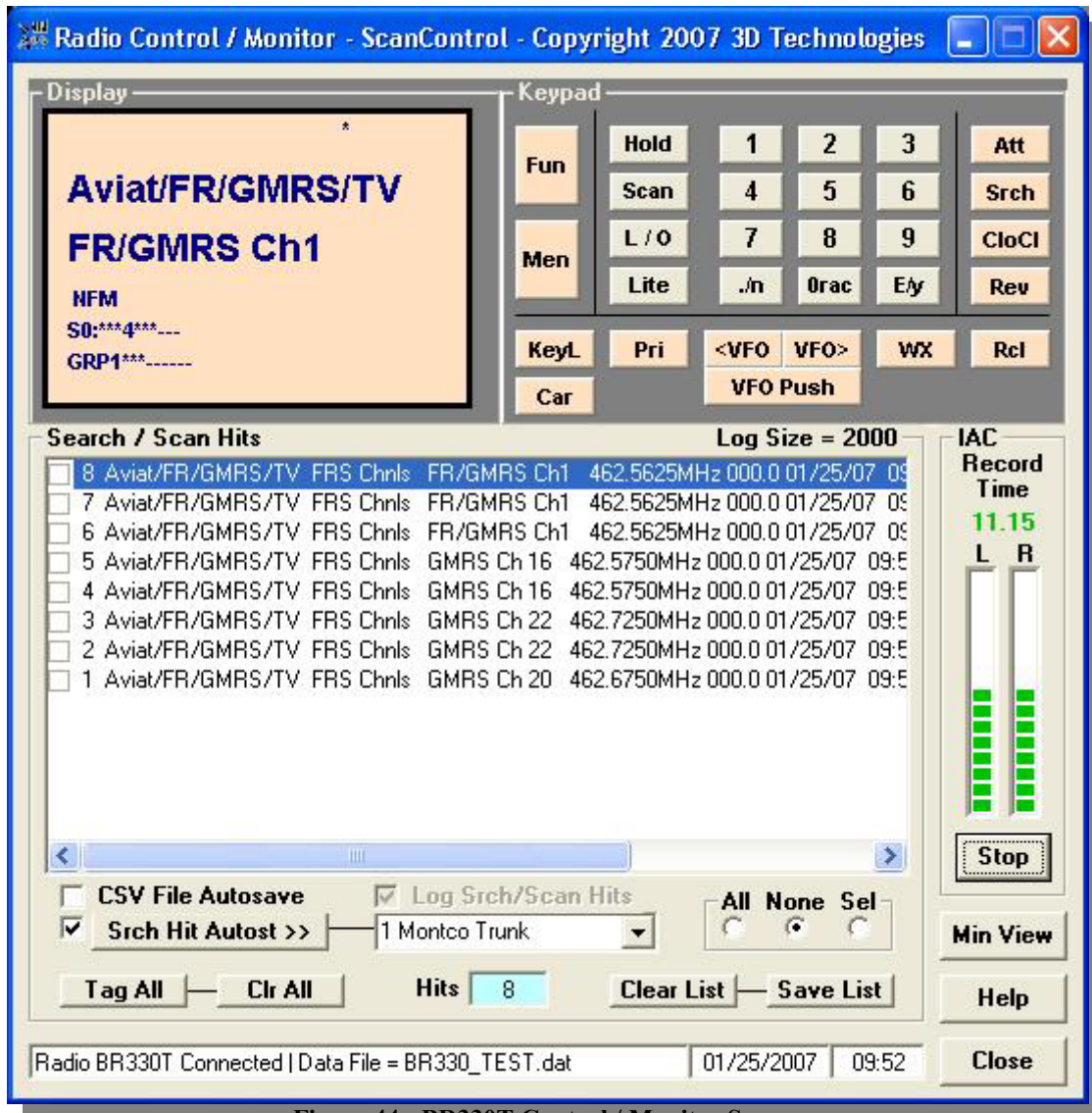
Figure 44 - BR330T Control / Monitor Screen

** See Screen Function descriptions below Figure 46.
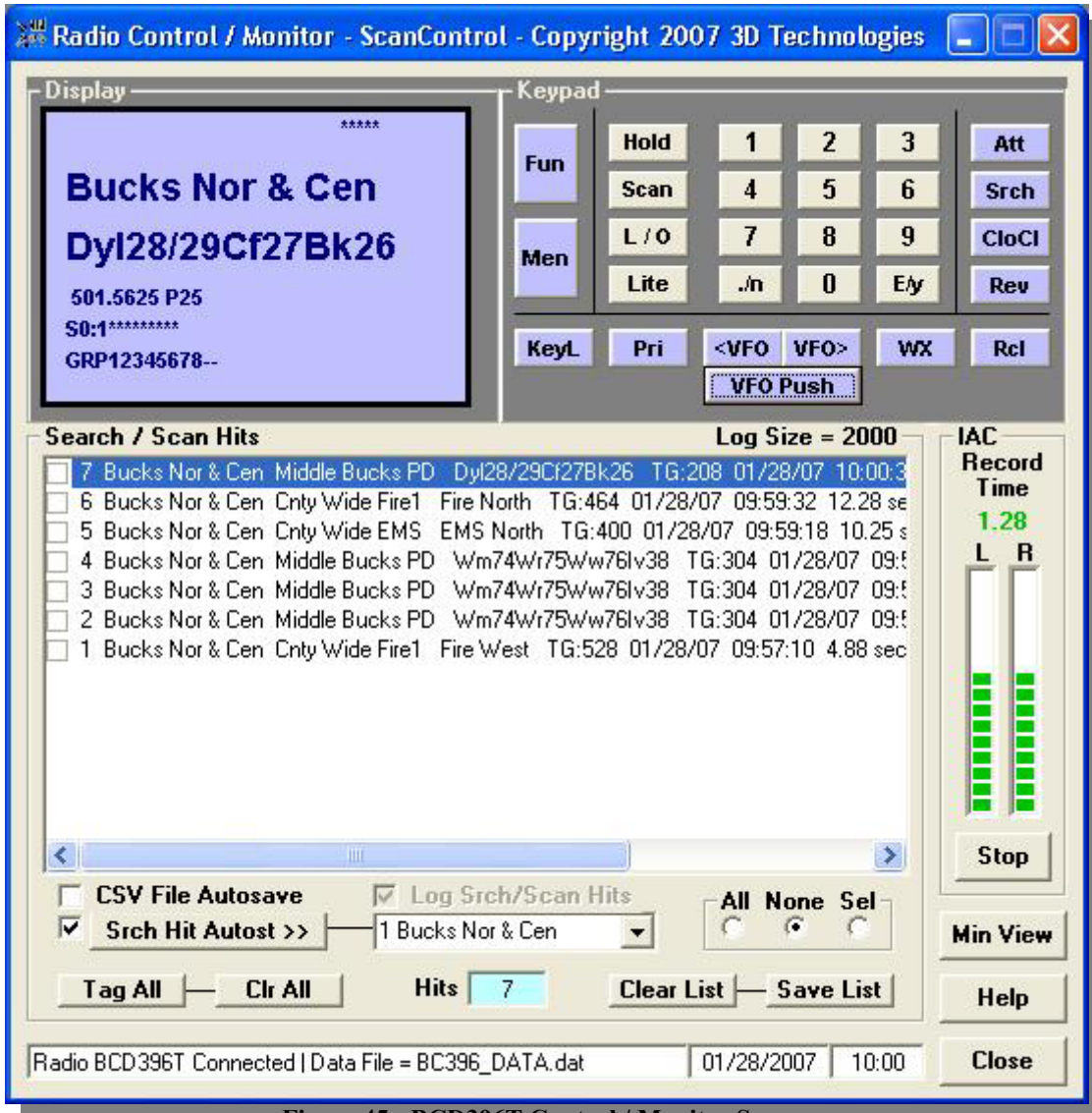
Figure 45 - BCD396T Control / Monitor Screen

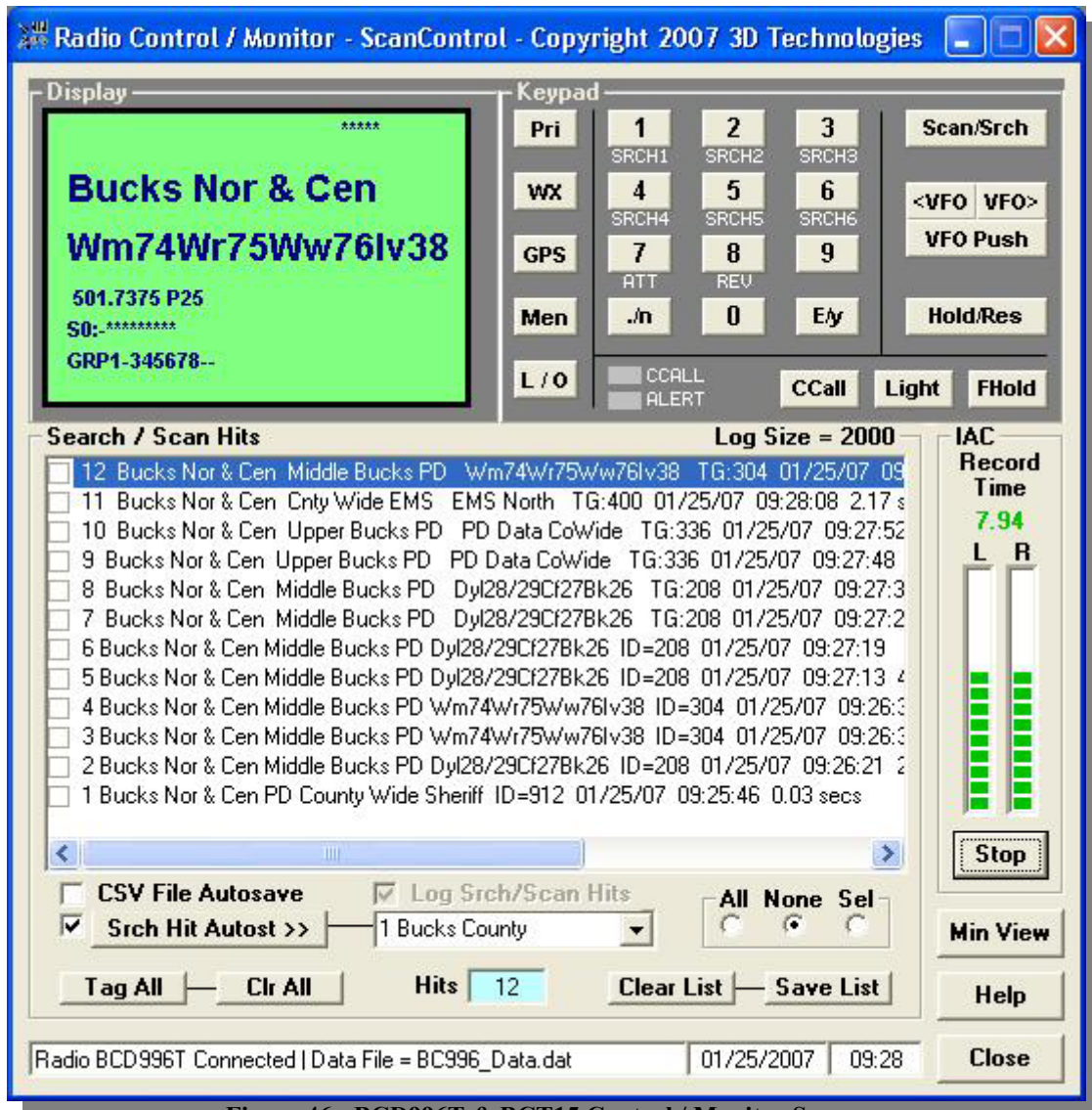** See Screen Function descriptions below Figure 46.

Figure 46 - BCD996T & BCT15 Control / Monitor Screen
(NOTE: Key assignments will differ slightly from above for BCT15.)

- **Display Section** – Presents the contents of the radio LCD display in real time.
- **Keypad Section** – Replicates all the radio keypad functions.
- **VFO Keys** – VFO control buttons that mimic VFO dial located on the scanner. See your radio's Users' Guide for details on how to use these keys.
- **Search / Scan Hits Section** – Provides display and function control of the Scan / Search Hits feature of ScanControl.
  - **Search / Scan Hit List Window –** Display list that gets populated with detailed information about individual Scan and Search Hits. Each line contains specific information about the Hit event. The check box □ on the left side of each Hit event can be used to flag a particular Hit event by the user. The user clicks on the checkbox to flag the Hit event. The flagged events are then easily distinguished from all the others in the list when reviewed or when the list is saved to the PCs hard disk. New Hit events are added to the top of the list and the list will hold up to the maximum number of Hits

selected by the user in the Program Options screen. If the number of Hits exceeds the maximum then the list "rolls over" saving the newest Hits and overwriting the oldest. The Search / Scan Hit List can be scrolled horizontally to view the entire Hit data row. Additionally, the Hit duration is appended to the end of the data row when the transmission is complete. Each Hit line in the list contains the following data:
"Hit#" "System Name" "Group Name" "Alpha Tag" "ID or Freq" "PL Code" "Date" "Time" "Hit Duration" "| *separator*" "# of hits for this ID/Freq" "Total Time for this ID / Freq hh:mm:ss"

o **Hits Autosave Checkbox –** Enables the Hit List Autosave function. If this checkbox is checked the Scan / Search Hit List will automatically be saved to the PCs hard disk when the Radio Control / Monitor screen is closed. This prevents the user from inadvertently losing the Hit List events when leaving the Control / Monitoring screen. The default for this checkbox is checked.

o **Log Srch/Scan Hits Checkbox –** Enables the Scan / Search Hit logging function. If this checkbox is unchecked then no Hit event logging takes place. The default for this checkbox is checked.

o **Search Hits Autostore Checkbox –** Enables the Search Hit Autostore feature. Autostore works for frequencies if the destination system is a conventional system and talkgroup IDs if the destination system is a trunked system. **A NEW GROUP NAMED *AUTOSTORE MMDDYY* WILL BE CREATED, IF IT DOESN'T ALREADY EXIST, IN THE DESTINATION SYSTEM TO HOLD THE AUTOSTORED HITS.** Search Hits listed in the Search / Scan Hit List Window can be tagged (checked) by clicking on the check box for the event item in the list. If Autostore is enabled the checked items will automatically be stored in the next available Channel location or talkgroup group location in ScanControl Memory in the system chosen in the Autostore >> Drop Down List. Search frequency hits are stored in channel locations and Search talkgroup ID hits are stored in talkgroup group locations in the destination system. *NOTE: Tagged <u>Scan</u> Hits ARE NOT stored by the Autostore feature. Scan Hits are already in ScanControl Memory in the system so there's no need to store them again. Only Search Hits are automatically stored.* The automatic storage action takes place when you click on the Save List button OR when you click on the Close button to exit monitoring IF THIS CHECK BOX IS ENABLED. Various notification messages will appear while the Autostore process in underway. Channel and talkgroup locations that receive Autostored values will include the following Alpha Tag displaying the number of the item tagged and the date and time of the hit - **AUTOSTORE #3 012104 100330.** This tag can then be changed by the user to be anything desired. ScanControl checks for duplicate frequencies and talkgroup IDs in the destination system during the Autostore process. If a duplicate is found the users' action is based on the Duplicate Option selection described below. If the user decides to store the value anyway then the Alpha Tag for the stored value will include a copy of the tag already found in the bank. ***NOTE: Autostored values ARE NOT automatically sent to the radio. The new values still have to be programmed into the radio system using the System Edit screen.***

o **Search Hits Autostore Button -** Click to manually trigger a Search Hit Autostore cycle as described above.

o **Autostore >> Drop Down Bank List –** Drop down list box to select the destination system for the Autostore tagged values in the Search / Scan Hit List.

- o **Tag All Button** – Turns on automatic tagging of all Search / Scan Hits. When clicked this button will tag all existing Search / Scan Hits AND it will start automatically tagging all new hits that arrive in the list.
- o **Clr All Button** - Turns off (Clears) automatic tagging of all Search / Scan Hits. When clicked this button will untag or clear all existing Search / Scan Hits AND it will turn off automatic tagging of all new hits that arrive in the list.
- o **Duplicate All, None, Select Option** - Search Hit Autostore duplicate mode. When Search Hit Autostore mode is on and duplicate frequencies or talkgroup IDs are found this setting determines how ScanControl handles the duplicate. All – store all duplicates found. None – store none of the duplicates. Select – presents the duplicate information to the user and allows him / her to select whether or not to store the duplicate information.
- o **Clear List Button –** Clears all entries from the Scan / Search Hit list box.
- o **Hit Count Box –** Displays the total current number of Search / Scan hits in the list.
- o **Save List Button –** Saves the entries from the Scan / Search Hit List box to a unique .CSV file on your PCs' hard disk. The .CSV files will have a name like 071602143220.csv (the 071602143220 filename is based on the current date / time stamp when the save occurs) and be located in the <drive>:\<install directory path>\Search Hits\ directory. The .CSV files can then be directly loaded into Microsoft Excel.

- **IAC Section**
  - o **Record Time Display** – Numeric display (0.00 Seconds) of audio recording time for the current Channel / TGID / Search Hit. This value displays RED when recording is paused and GREEN when recording is active. The time in seconds represents the TOTAL accumulated time for the Channel / TGID / Search Hit recording since the session began.
  - o **L / R Audio Level Display** – Recording audio level bar graphs for the Left and Right channels of audio input. Some radios only output 1 channel (Mono) of audio. In those cases only the Left or Right bar graph will be active during recording.
  - o **Start / Stop / Res(ume) Button –** Clicking Start begins the current recording session. Clicking Stop during the current recording session pauses the session. Clicking Res(ume) restarts the current session.

- **Operations Controls**
  - o **Min View Button** - Hide the full Control / Monitor screen and open the "always on top" Mini Monitor Screen (see below).
  - o **Help Button** - Click to open this Help file.
  - o **Close Button** – Click to close the Control / Monitor Screen and return to the Main Control Screen.

- **Status Display Section**
  - o **Status Display Window** – Displays program status information.
  - o **Date Display Window** – Displays the current system date.
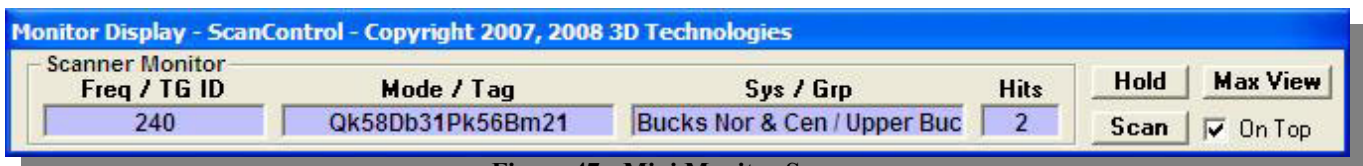 - o **Time Display Window** – Displays the current system time.

Figure 47 - Mini Monitor Screen

- **Scanner Monitor** – Displays real time snapshot information about the active channel or talkgroup ID being monitored.
    o **Freq / TG ID** – Displays the active frequency or talkgroup ID.
    o **Tag** – Displays the Alpha Tag associated with the frequency / talkgroup ID.
    o **Sys / Grp** – Displays the associated system and group of the scan hit.
    o **Hits** – The current number of hits in the Search / Scan Hit list. Updated as new hits arrive.
- **Operations Controls**
    o **Hold Button** – Places the radio in Hold mode to stop on the current channel / TGID.
    o **Scan Button** – Resumes Scan mode.
    o **Max View Button** – Close the Mini Monitor Screen and show the full Control / Monitor Screen.
    o **On Top Checkbox** – Checked – The Mini Monitor remains "always on top" of your Desktop. Unchecked – the Mini Monitor remains open and active but can be placed in the background of your Desktop as new applications are opened.

NOTE: The Mini Monitor Screen can be positioned anywhere on your Desktop for maximum visibility and convenience.

Program / Load Progress Screen

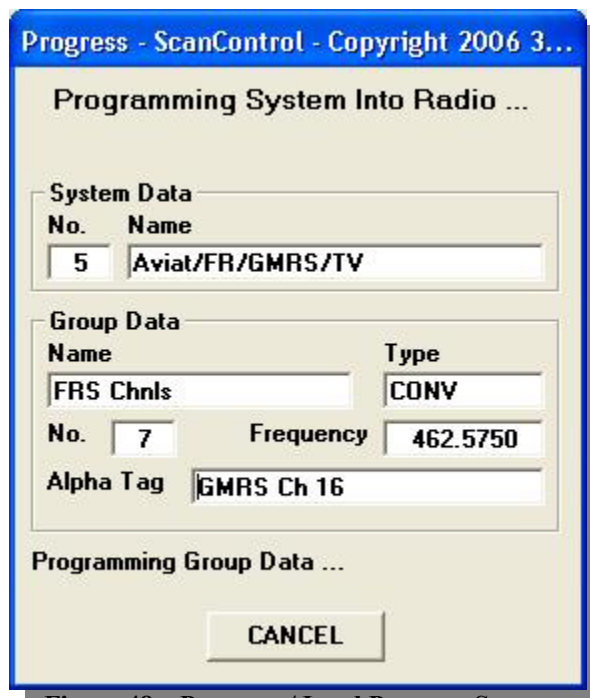The Program / Load Progress screen displays the status of any program or load process while it is in progress.

Figure 48 – Program / Load Progress Screen

- **System Data** – Displays the number and name of the system being programmed or loaded.
- **Group Data Section**:
    o **Name** – Displays the name of the Group being programmed or loaded.

- o **Type** – Displayed the type of Group being programmed or loaded: Conventional Frequency, Trunk Frequency or Talkgroup ID.
- o **No.** – The number of the frequency or TGID in the Group being programmed or loaded.
- o **Frequency/TGID** – Displays the frequency or TGID value being programmed or loaded.
- o **Alpha Tag** – Displays the alphanumeric tag for the frequency / TGID being programmed or loaded.
- **Operation Controls**
  - o **Cancel Button** - Click to cancel ScanControl program or load. *NOTE: When loading systems from the radio ScanControl must load a complete system before interrupting the data load. This is necessary for ScanControl to maintain data integrity between the radio memory and ScanControl memory.*

Intelligent Audio Capture (IAC)

Intelligent Audio Capture, or IAC, provides the ability to record to your PC hard disk the audio normally heard from your scanner's speaker or earphones. These audio files can then be played back using any PC media file application such as iTunes or Windows Media Player. IAC is intelligent in that it records audio in "streams". Each stream is a continuous audio recording of each channel, TGID or search hit that has been active during the recording session. ScanControl can currently accommodate up to 100 parallel active streams at one time. IAC also drops out any "dead air", time when there is no activity on a particular channel, TGID or search hit. This means the final recording is a condensed, continuous stream of a single channel, TGID or search hit for the entire time the recording session is active. Of course, the scanner can only receive one channel, TGID or search hit at a time so the audio streams will be made up of only the audio segments, called snippets, that are actually received by the radio. See the diagram below: Each snippet represents a slice of time when the channel has gone active during a scanning / search session. If the radio stops on that time slice then IAC records that audio and places it in the file for that channel / TGID / search hit. If the radio does not stop on a particular channel / TGID / search hit because it is receiving another one, (e.g. snippet5 vs snippet2, snippet7 vs snippet1) then, of course, that piece of audio is never received so it cannot be recorded. The grey snippets below represent times when the channel / TGID / search hit went active but was not recorded because the radio was "listening" on another channel / TGID / search hit.
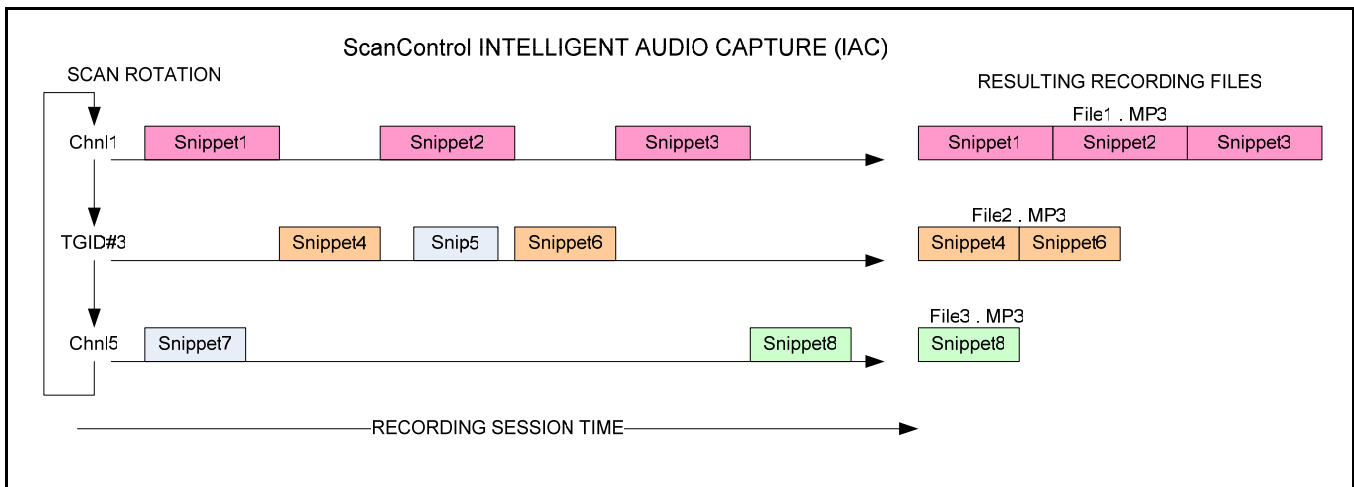
Figure 49 - Intelligent Audio Capture

Implementing Intelligent Audio Capture (IAC)

1. **Audio From Your Scanner** – The scanners that ScanControl supports have different methods of transferring the received audio to the PC. The table below shows each model ScanControl supports and the recommended way to connect the scanner to your PC's sound card. Please note the cautions and warning statements in the chart as an incorrect connection can damage your radio, sound card or both. In all cases you will need an audio "patch" cable, stereo or mono depending on your radio, to connect your radio's audio output to your PC's sound card input. Our testing shows a stereo cable works with all radios even though some only output one channel. Pay particular attention to the **Audio Volume from Radio** column in the table below. On some radios the audio level (volume) has to be controlled using the volume control on the

radio, in others the audio volume is output at a constant level regardless of where the volume control on the radio is set.

ScanControl Intelligent Audio Capture (IAC) Radio Usage Parameters   3/24/2009
WARNING: Using incorrect audio output / input connections can damage your sound card and / or your radio.

Radio Type	Recommended Audio Connection(1)	Audio Output from Radio	Audio Volume from Radio	Record Out Attribute(2)	Comments
BC245XLT	Earphone Jack >>> Sound Card LINE IN	Left + Right Chnl	Radio Volume Control	S/W Only	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
BC895XLT	LINE Out >>> Sound Card LINE IN	Left Chnl MONO	Radio Volume Control	Radio + S/W	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
BC898XLT	LINE Out >>> Sound Card LINE IN	Left Chnl MONO	Constant Level	Radio + S/W	
PRO2052	Earphone Jack >>> Sound Card **MIC IN**	Left Chnl MONO	Radio Volume Control	S/W Only	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card. Use MIC IN (high impedence) to avoid damage to radio.**
BC780XLT	TAPE Out >>> Sound Card LINE IN	Left Chnl MONO	Radio Volume Control	Radio + S/W	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
BCT8	Ext Spkr >>> Sound Card LINE IN	Left Chnl MONO	Radio Volume Control	S/W Only	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
BC250D / BC296D	Earphone Jack >>> Sound Card LINE IN	Left + Right Chnl	Radio Volume Control	S/W Only	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
BC785D / BC796D	TAPE Out >>> Sound Card LINE IN	Left + Right Chnl	Constant Level	Radio + S/W	
SC230	Earphone Jack >>> Sound Card LINE IN	Left + Right Chnl	Radio Volume Control	S/W Only	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
BC246T	Earphone Jack >>> Sound Card LINE IN	Left + Right Chnl	Radio Volume Control	S/W Only	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
BR330T	Earphone Jack >>> Sound Card LINE IN	Left + Right Chnl	Radio Volume Control	S/W Only	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
BCD396T	Earphone Jack >>> Sound Card LINE IN	Left + Right Chnl	Radio Volume Control	S/W Only	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
BCT15	REC Out >>> Sound Card LINE IN	Left + Right Chnl	Constant Level	Radio + S/W	
BCD996T	REC Out >>> Sound Card LINE IN	Left + Right Chnl	Constant Level	Radio + S/W	
PSR500 / PRO106	Earphone Jack >>> Sound Card LINE IN	Left + Right Chnl	Radio Volume Control	None	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**
PSR600 / PRO107	Earphone Jack >>> Sound Card LINE IN	Left + Right Chnl	Radio Volume Control	None	**CAUTION: Adjust radio to minimum volume to avoid damage to sound card.**

Figure 50 - IAC Usage Matrix

2. **Configuring the PC Sound Card** – The PC's Sound Card is the means by which the radio's audio is transferred into the PC for recording. Every PC sound card is different but almost all have multiple inputs and outputs. Your PC should have a sound card control utility similar to the one displayed below. There are two or three controls you need to adjust in order to have the audio coming from the scanner set to the proper volume level and input. **Master Volume** – The sound card should have a Master Volume control that should be set to the appropriate level. **Recording Source (some cards)** – The recording source control tells the sound card which input is being used as the source for the recorded audio coming into the PC. **Input Control** – The input control enables and disables the various inputs on the sound card and sets a volume level, subject to the Master Volume level, for the input. So, if your radio's output is connected to the Line-In input of your sound card then you would do the following: Open the sound card control utility from your PC's control panel. Enable (un-mute) the Line-In input of the sound card and set its volume level. Set the Recording Source to be the Line-In input. Set the Master Volume to be the appropriate level. If all these connections and settings are made correctly then you should

be able to hear the radio's audio coming from the PC speakers if your channels have been programmed to enable Record Out. The general rule of thumb is the volume level you hear from the PC speakers will be the volume level that is recorded by IAC, however, you should use the audio level bar graphs in the IAC section of the ScanControl Control / Monitor screen to verify the proper level.
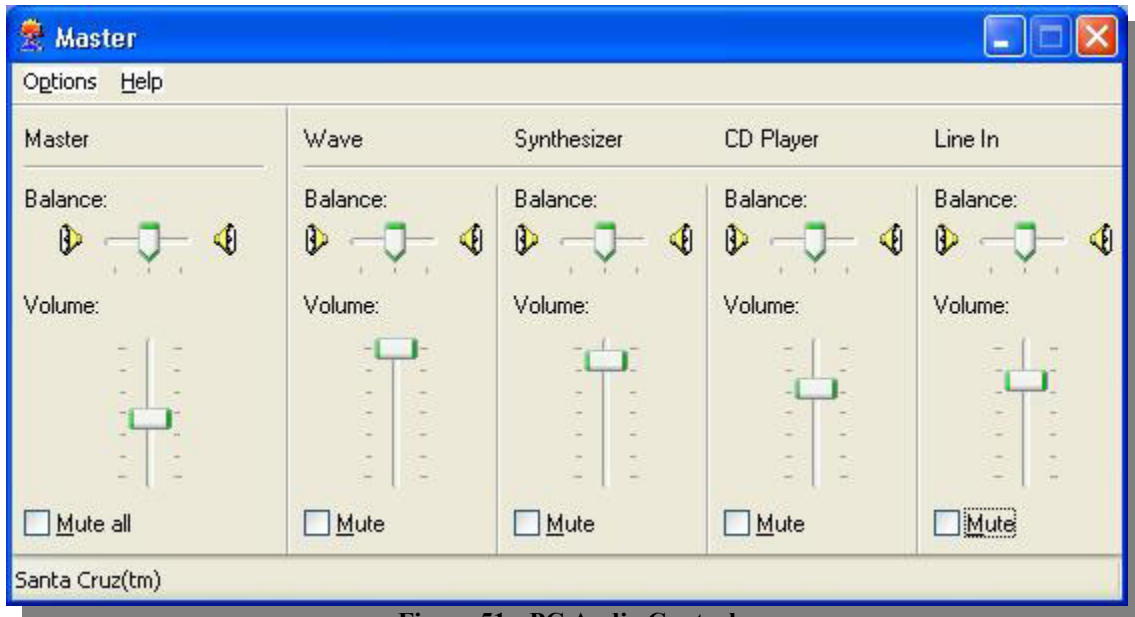

Figure 51 - PC Audio Control

3. **Configuring IAC Program Options** – Start ScanControl with your radio connected via the serial cable as you would normally and the audio cable as described above. Open the Program Options screen and set the Audio Device, Audio Device Line, Wave Format and Group by options as appropriate for your configuration. You <u>should not</u> have to adjust the THold setting, 100 is the recommended value. Save these settings and close the Program Options screen.

Figure 52 - IAC Program Options

4. **Enabling / Disabling Recording for Channels / TGIDs** – ScanControl supports the construct of having an individual Record Out attribute for each channel / TGID in a bank or system and for a particular search range. **IF THESE RECORD OUT ATTRIBUTES ARE NOT ENABLED IN THE RADIO AND IN SCANCONTROL (R box checked on the Bank, ScanList, System or Group Edit Screens) THEN SCANCONTROL WILL NOT RECORD THE AUDIO, EVEN IF THE AUDIO CAN BE HEARD COMING THROUGH THE PC.** Referencing the table of radio types above, some radios support a Record Out attribute in the radio, others do not. Those that do require that you check the R box for the channel / TGID and then program the data

into the radio. Those that handle the Record Out attribute in S/W only require that you check the R box for the channel / TGID but there's no need to then program the data into the radio. **DMA Base / Mobile radios also have a System Level Record Control with 3 possible settings: OFF – Means no audio will be sent out the Record Out connector for that system regardless of how the Record Out attributes on each channel / TGID is set, MK – Marked means only the channels / TGIDs in that system with the Record Out attributes set will have their audio sent to the Record Out connector, ALL – All channels / TGIDs will have their audio sent to the Record Out connector for that system regardless of how the Record Out attributes on each channel / TGID is set. The user also needs to be cognizant of this setting to be sure it is set for the desired option.**

5. **Starting a Recording Session** – Once you have done all of the configuration steps above and you are hearing the radio's audio through the PC speakers you are ready to start a recording session. From within ScanControl open the Control / Monitor screen. Click the Start button within the IAC Section of the Control / Monitor screen (see the Control / Monitor screen shot for your particular radio elsewhere in this document). The displays within the IAC Section will become un-greyed and as a scan or search hit is logged in the Scan / Search Hit window and audio is received from the radio you should see the Recording Time number counting up and the audio level bar graphs bouncing up and down indicating the recording level.

6. **Completing a Recording Session** – The IAC recording session will continue until you click the IAC Stop button or until you Close the Control / Monitoring screen in ScanControl. If you click the IAC Stop button its label will change to "Res" for resume, allowing you to resume the current session if you wish.

7. **Playback of the Recorded Files** – IAC recorded files are not played back through ScanControl. The files can be played back using any available PC media software such a iTunes or Windows Media Player. The files will be located on the PC's hard drive in accordance with the folder structure established with the **Group by** IAC option set on the ScanControl Program Options screen. The screen shots below show how the IAC recording files are organized for each of the 3 Group by options. Using Windows Explorer the user can locate any of the IAC recording files and double click on them to invoke the default audio player and playback the recording.

Group by option – Session:
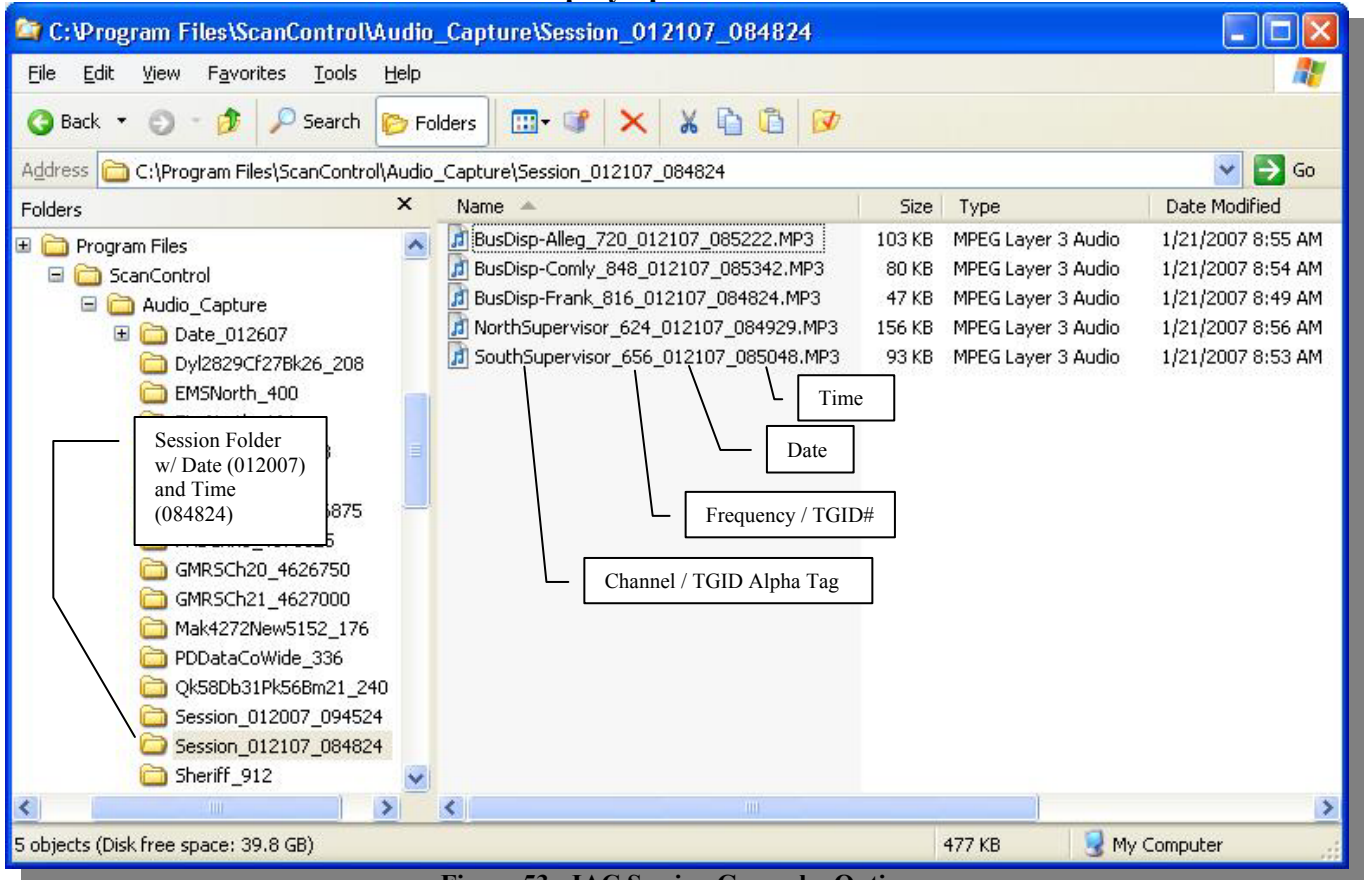
Figure 53 - IAC Session Group by Option

Group by Option - Date / Time:
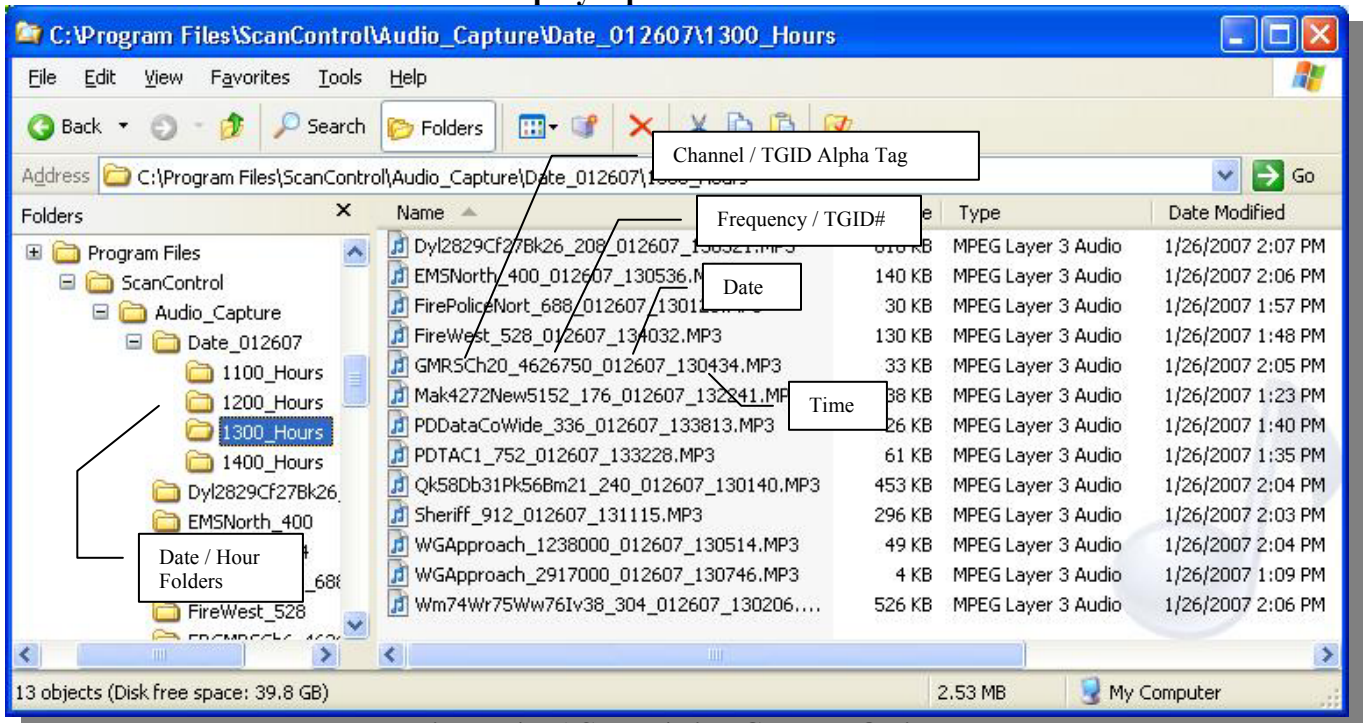
Figure 54 - IAC Date / Time Group by Option
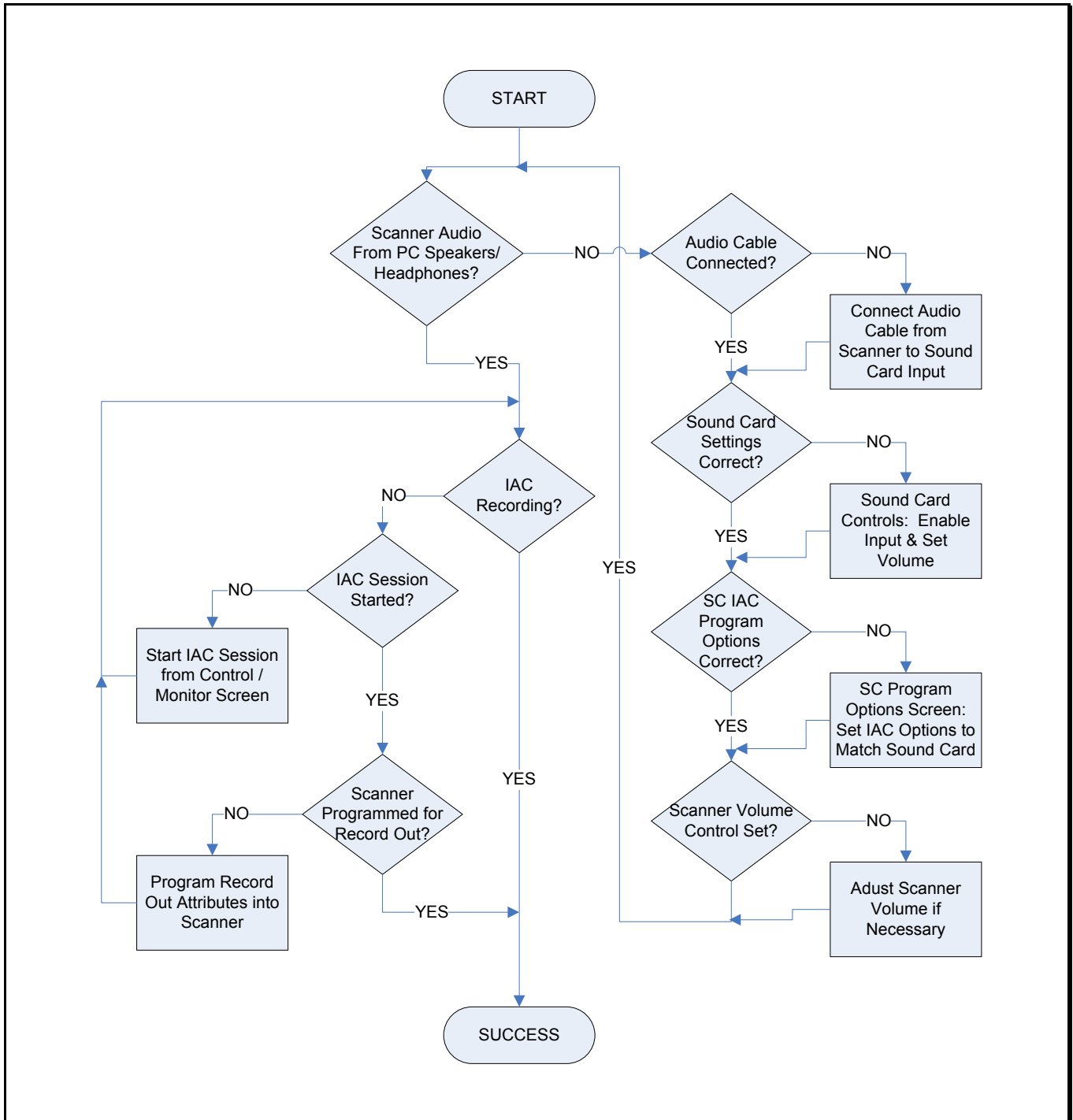
Group by Option – Channel / TGID:
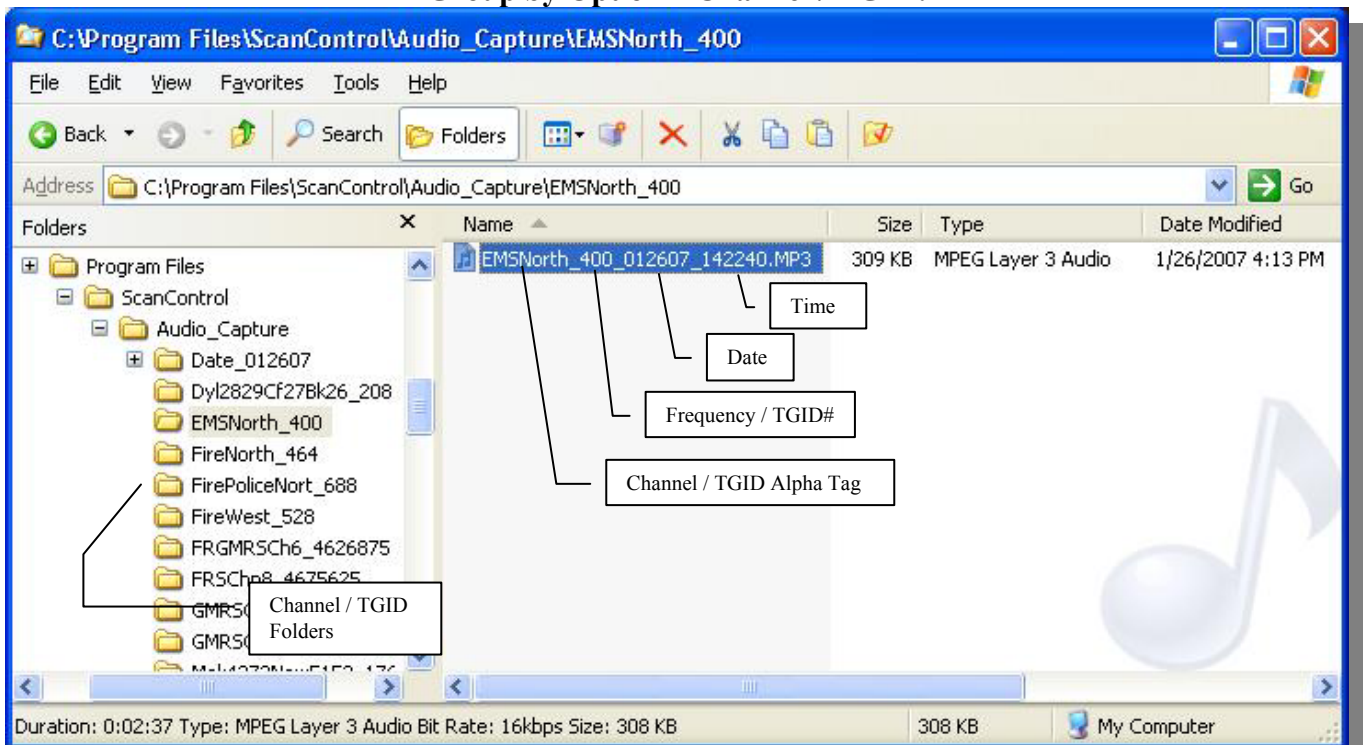
Figure 55 - IAC Chnl / TGID Group by Option

8. **IAC Troubleshooting** – If you are having trouble getting IAC to record your scanner's audio the following flowchart should help.


Figure 56 - IAC Troubleshooting Flowchart

Program Options Screen

The Program Options Screen allows the user to set various program option defaults and thus tailor the ScanControl environment. Each option is enabled when checked and disabled when unchecked. These values are stored as part of the current session and saved for all future sessions. In most cases these defaults can be temporarily overridden on their respective screens when using the program. However, these defaults will again be in effect when ScanControl is restarted.
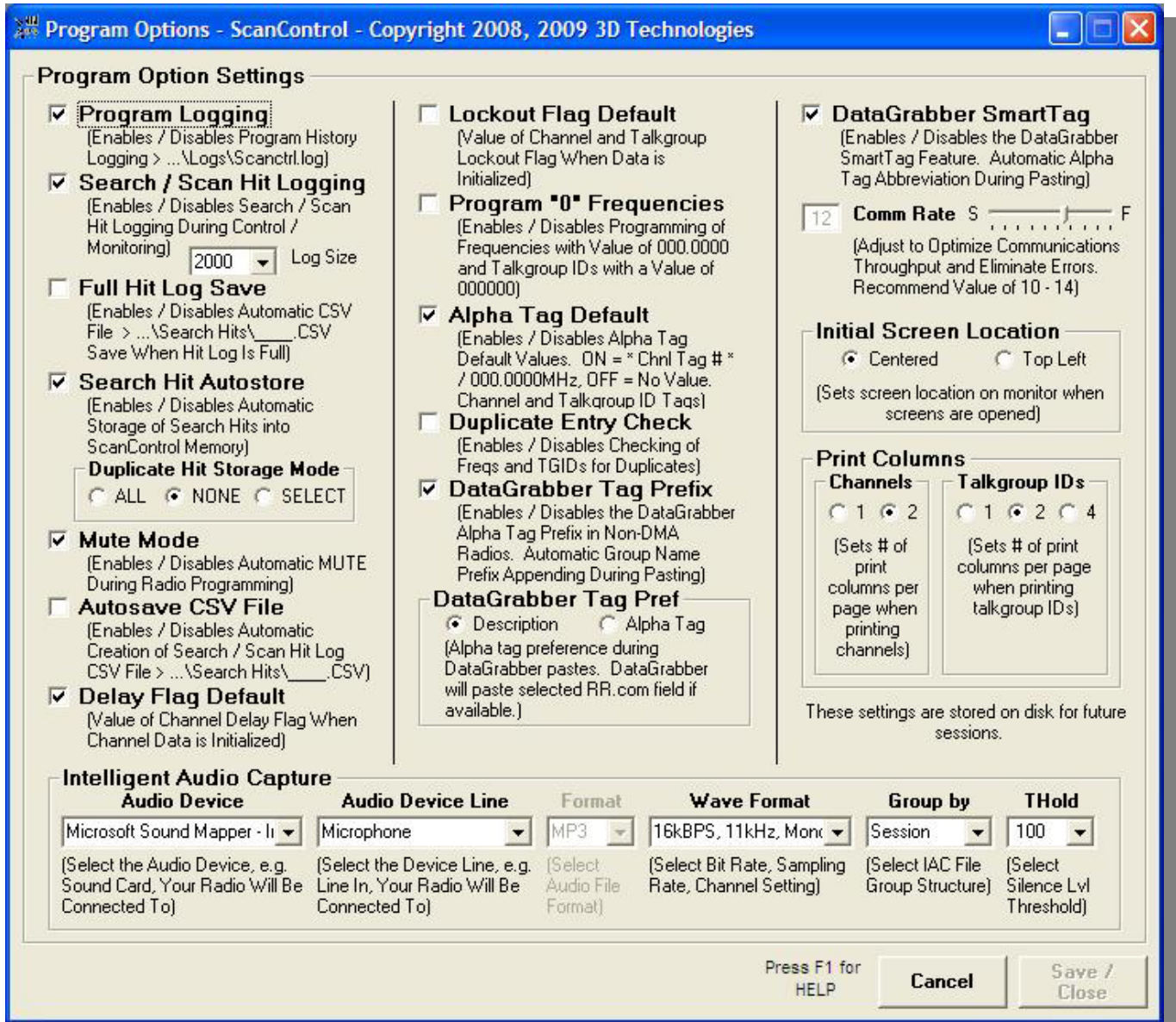
Figure 57 - Program Options Screen

- **Program Logging** - Program logging is a feature that logs all program activity to a file on your hard disk. Operations such as Edit Banks, Edit Talkgroups, Control / Monitor, Exit Program, etc. are captured and stored in the file so an audit trail of operations is available for reference and tracking. Setting can be overridden on the Main screen.

- **Search / Scan Hit Logging** - Sets the default for Search / Scan Hit Logging on the Control / Monitor Screen. If checked Search / Scan Hit Logging is ON when you enter the Control / Monitor screen. If unchecked Search / Scan Hit Logging is OFF when you enter the Control / Monitor screen. Setting can be overridden on the Control / Monitor screen.
- **Log Size** - Sets the Log Size for Search / Scan Hit Logging. When this value is reached during Hit Logging the log then "rolls over", i.e. the oldest logged hit is dropped from the list and the newest log hit replaces it at the top of the list. Logging does not stop when this maximum size is reached, it continues adding hits to the top of the list.
- **Full Hit Log Save** - Sets the default for the Full Hit Log Save feature. When checked, during Control / Monitoring, ScanControl automatically creates a Hit Log CSV File whenever the log fills to the Log Size, and any multiple of the Log Size. No user message is displayed when this file is created so as to allow ScanControl to continue logging unattended while automatically saving the log every time the count reaches the log size or any multiple thereof. The Full Log Save CSV file will have a "FullLog" prefix on the filename.
- **Search Hit Autostore** - Sets the default for Search Hit Autostore Mode on the Control / Monitor Screen. If checked Search Hit Autostore is ON when you enter the Control / Monitor screen. If unchecked Search Hit Autostore is OFF when you enter the Control / Monitor screen. Setting can be overridden on the Control / Monitor screen.
- **Mute Mode** - Sets the default for Mute Mode when programming and loading data to / from the radio. Mute mode ON automatically mutes the radio when performing these functions. Mute mode OFF does not mute the radio when performing these functions.
- **Autosave CSV File** - Sets the default for Autosave CSV File Mode on the Control / Monitor Screen. If checked Autosave CSV File Mode is ON when you enter the Control / Monitor screen. If unchecked Autosave CSV File Mode is OFF when you enter the Control / Monitor screen. Setting can be overridden on the Control / Monitor screen.
- **Delay Flag Default** - Sets the default for the Delay Flag when initializing bank data. When checked the Delay Flag is set to ON when channel data is initialized. When unchecked the Delay Flag is set to OFF when channel data is initialized.
- **Lockout Flag Default** - Sets the default for the Lockout Flag for channels and talkgroups when initializing bank data. When checked the Lockout Flag is set to ON when channel or Talkgroup data is initialized. When unchecked the Lockout Flag is set to OFF when channel or Talkgroup data is initialized.
- **Program "0" Frequencies** - Sets the default for the Program "0" Frequencies mode on the Edit Banks and Edit ScanLists screens. When checked the Program "0" Frequencies mode is set to ON when you enter the editing screens. When unchecked the Program "0" Frequencies mode is set to OFF when you enter the editing screens. Setting can be overridden on the Edit Banks & Edit ScanList screens.
- **Alpha Tag Default** - Sets the default for the Alpha Tag values when initializing bank data. When checked the Alpha Tags are defaulted to a string with the Channel / Scanlist # in it, e..g "* Chnl Tag #27 *". When unchecked the Alpha Tags are left blank when Channel / ScanList data is initialized.
- **Duplicate Entry Check** - Sets the default for frequency and Talkgroup ID duplicate entry checks. When checked the duplicate entry check is performed and the user is alerted if a duplicate frequency or Talkgroup ID is entered. When unchecked the duplicate entry check is not performed therefore the user is not alerted if a duplicate frequency or Talkgroup ID is entered.

- **DataGrabber SmartTag** – Enables / disables automatic alpha tag abbreviation during DataGrabber pastes. When enabled, commonly found phrases like "Police Dept" or "Public Service" are automatically abbreviated to "PD" and "Pub Svc" during the paste process. This results in shorter alpha tags that don't have their right end characters "chopped off" in ScanControl and in the radio's display. The list of phrases can be found in the file named "SmartTags.cfg" which is located in the ScanControl Installation Directory (Default is "c:\program files\ScanControl") and can be amended by adding phrase pairs to the end of the file using any text editor. MAKE A COPY OF THE ORIGINAL SMARTTAGS.CFG FILE BEFORE AMENDING IT IN CASE IT NEEDS TO BE RESTORED. A phrase pair is a simple two word pair record with the words separated by a comma. A valid word pair would be [US, United States] without the brackets. The first word [US] is the desired abbreviation and the second word or phrase [United States] is the phrase to be abbreviated. If the user amends new phrase pairs to the file it is recommended the user make a copy of the updated file using a different file name so it can be restored after a software upgrade (the upgrade will replace the SmartTags.cfg file with a default list).

- **DataGrabber Tag Prefix** – Enables / disables automatic prefixing in bank style, non DMA radios. This option uses the "Group" name from RR.COM as an automatic prefix for the alpha tag going into a channel or talkgroup ID during a DataGrabber paste. If a group of frequencies is titled "Chesterfield County" in RR.com and there are 20 frequencies with their alpha tags in the group, the DataGrabber will append "Chesterfield Co" to the beginning of each alpha tag for each frequency. This makes the tags more meaningful when you're pasting a large number of channels from several groups into a bank during one paste step.

- **DataGrabber Tag Pref** - Selection for the DataGrabber alpha tag data source. The DataGrabber can use either the Alpha Tag field or the Description field on the radioReference.com web page for the alpha tag information during the DG Paste process. This option lets the user determine which is preferred. The selection is not absolute. If Alpha Tag is preferred but there is no Alpha Tag the DataGrabber will use the Description if one is available. If Description is preferred and there is no Description the DataGrabber will use the Alpha Tag if one is available.

- **Comm Rate Slide Bar** – Adjustment for the communications interface between the scanner and ScanControl running on your PC. ScanControl communicates with the scanner asynchronously through the serial port. Since much of that communication dialogue is timing dependent ScanControl needs a way to compensate for differences in PC speed, CPU loading and overall performance. This slider bar allows the user to "slow down" or "speed up" the communications handshaking to accommodate these differences. The small window below the slide bar displays the relative value selected (number from 1 to 19) with the default being a value of 10. The optimum setting for most radios is between 11 and 14. If you change this setting the new value will be stored as part of your session settings and recalled upon each future use of ScanControl. ***OPERATING TIP: If you are experiencing problems using ScanControl such as losing the connection to the radio, garbled or missing data in the radio or other error messages, selecting a lower number on the control should help correct this problem. If ScanControl is operating properly but appears to be running too slowly selecting a higher number on the control should increase performance. The caution, however, is if you increase the value too much the program may become unstable and communications with the scanner may cease to function until you reduce the setting back to an operating value.***

- **Initial Screen Location** - Sets the default value for initial screen location for all screens. This option allows users with lower resolution monitors (800 X 600) to maximize the screen area to be used by ScanControl. 800 / 600 screen users may want to set this value to "Top Left" so they see full screens when the program runs. Higher resolution screen users would want this setting to be "Centered" in most cases.
- **Print Columns** - User can select the number of columns that will appear on a bank data printout. Choices can be made for Channel printouts and Talkgroup ID printouts.
- **Intelligent Audio Capture (IAC) Options**:
  - **Audio Device** – Drop down list containing available audio devices in the PC. Select the device that will be connected to the scanner for audio input. This is typically the PC's sound card.
  - **Audio Device Line** – Drop down list containing the available device line(s) for the audio device selected above. A device line is a specific input to which the scanner's audio output should be connected. Choices here might be line in, mic in, mixer, etc.
  - **Format** – Drop down list containing available sound file formats (i.e compression types) for storing the recorded audio. Only MP3 is supported in the initial release of ScanControl Version 6.x.
  - **Wave Format** – Drop down list containing available Bit Rate, Sampling Rate and Channel combinations. The higher the Bit and Sampling Rates the better the sound quality. However, the higher the Bit and Sampling Rates the larger the file size of the recorded audio file. Choose Mono or Stereo channels depending on whether or not your radio outputs audio in Mono or Stereo.
  - **Group by** – Drop down list containing IAC Group by options. Select an audio file "Grouping" option. The three current options are Session, Date/Time and Chnl / TGID. The Session option places all the audio files for all Chnls / TGIDs / Searches etc. into one folder labeled with a date / time stamp based on when the session started. The Date / Time option creates a folder hierarchy with the top folder being the Date, subfolders under it, one for each hour of the day and then each of the Chnl / TGID / Search etc. audio streams is placed into a folder based on the hour in which the audio stream began. The Chnl / TGID option creates a folder for each Chnl / TGID being monitored and places each audio stream file into the appropriate folder.
  - **THold** – Drop down list for selecting the silence threshold level. This threshold level tells ScanControl what audio input level value should be the threshold for what the software should consider as "silence", or no audio. This value is used to determine when the audio recorder should turn on or off based on the amplitude of the incoming audio. This functions much like a VOX control on a voice activated tape recorder. The default level of 100 is optimized for almost all situations and should rarely have to be changed.

Load File Screen

The Load File Screen allows the user to select the drive, folder and filename of the ScanControl Data File to be loaded into the ScanControl Memory Area.
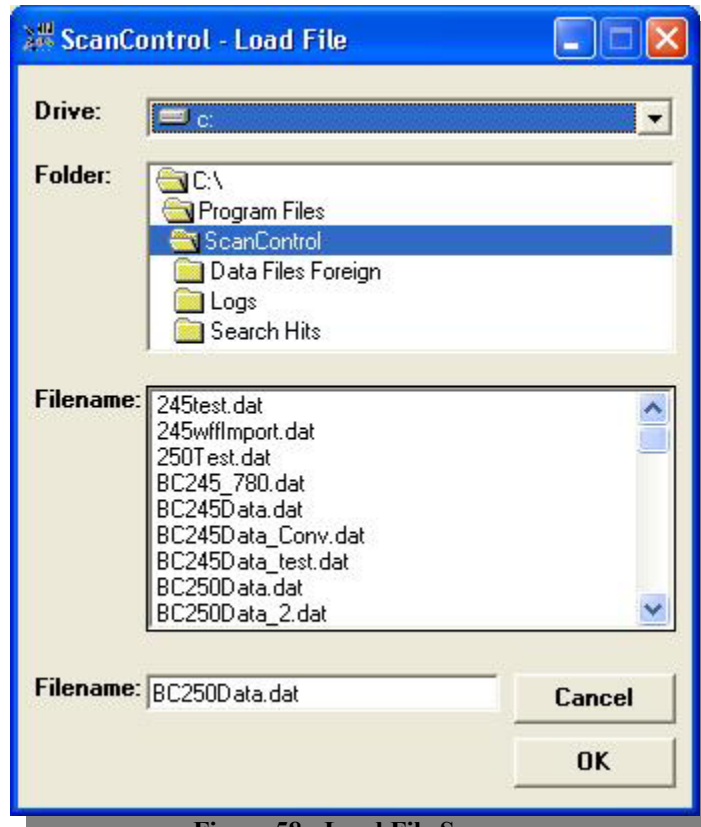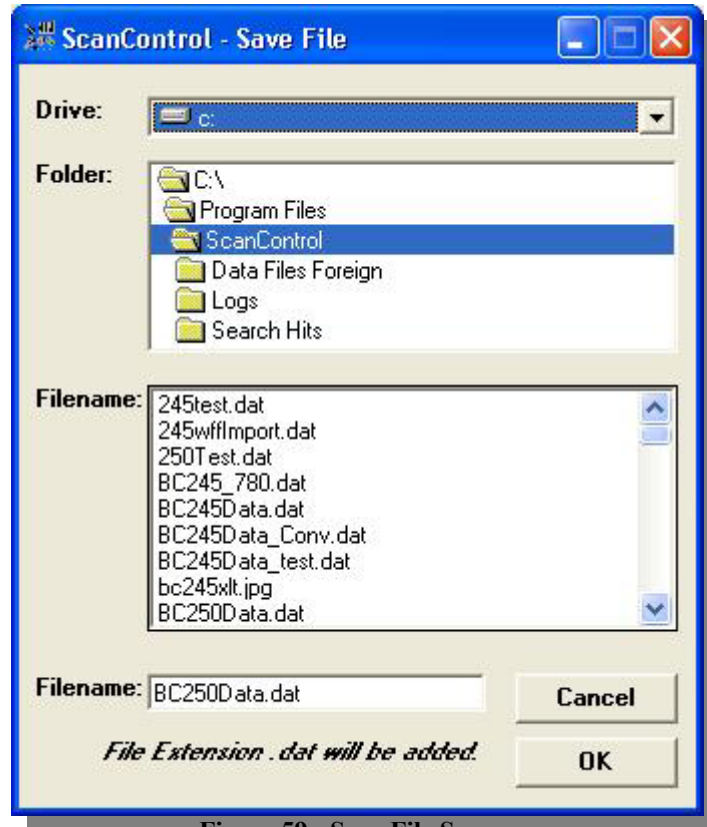

Figure 58 - Load File Screen

- **Drive Selection** – Drop down box used to select the drive letter of the device where a ScanControl Data File will be loaded from.
- **Folder Selection** – Selection box used to select the folder on the drive where a ScanControl Data File will be loaded from.
- **File Selection** – Selection box used to select the file from the folder on the drive where a ScanControl Data File will be loaded from.
- **Filename Entry** – Data entry field that displays the selected Filename or allows entry of a Filename for loading.
- **Operation Controls**
  - o **OK Button** – Click to proceed with ScanControl Data File load.
  - o **Cancel Button** - Click to cancel ScanControl Data File load.

Save File Screen

The Save File Screen allows the user to select the drive, folder and filename of the ScanControl Data File to be saved from the ScanControl Memory Area.

Figure 59 - Save File Screen

- **Drive Selection** - Drop down box used to select the drive letter of the device where a ScanControl© Data File will be saved.
- **Folder Selection** - Selection box used to select the folder on the drive where a ScanControl Data File will be saved.
- **File Selection** - Selection box used to select the file from the folder on the drive where a ScanControl Data File will be saved.
- **Filename Entry** - Data entry field that displays the selected Filename or allows entry of a Filename for saving.
- **Operation Controls**
  - **OK Button –** Click to proceed with ScanControl Data File save.
  - **Cancel Button -** Click to cancel ScanControl Data File save.

Appendix

Table of Figures

Limited Software Warranty:

LIMITED WARRANTY. The warranties and disclaimers described in this paragraph are collectively the "Limited Warranty". 3D Technologies warrants to you (and only you) that the Software Product will perform substantially in accordance with the accompanying documentation (if any) for a period of ninety (90) days from the date of original purchase of a license to the Software Product from an authorized retailer or directly from 3D Technologies (or the date you have obtained authorization from 3D Technologies or an authorized retailer to convert an Demonstration Version to a Full-License Version) (in each case the "Purchase Date"). Implied warranties on the Software Product, to the extent required by applicable law, are limited to ninety (90) days from the Purchase Date. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, 3D TECHNOLOGIES AND ITS SUPPLIERS DISCLAIM ALL OTHER WARRANTIES AND CONDITIONS WITH REGARD TO OR ARISING OUT OF THE SOFTWARE PRODUCT, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT AND/OR ACCURACY OF INFORMATION. The Limited Warranty is void if failure of the Software Product has resulted from accident, abuse, misapplication, use of the Software Product other than as described in the documentation issued by 3D Technologies, use of the Software Product in combination with other Software Products that are not described as compatible in the documentation issued by 3D Technologies, or your breach of the terms of this EULA. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State. No individual (except a duly authorized officer of 3D Technologies) and no reseller or retailer has any authority to amend or add to any of the above representations and disclaimers.

NASCAR and the NASCAR logo are registered trademarks of The National Association for Stock Car Auto Racing, Inc.