

TrakkStar Tutorial

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This tutorial outlines the steps necessary for some of the more common computer aided scanning activities. You may wish to *PRINT* this document now, so you can follow along as you explore TrakkStar. If you haven't worked with TrakkStar before, it is *STRONGLY* recommended that you follow this tutorial from start to finish. Doing this will give you a guided tour through most of the main TrakkStar features.

At the end of this tutorial are the answers to some frequently asked questions. If you get an error message from TrakkStar during any of these examples, refer to the frequently asked questions section, or the radio troubleshooting section of the on-line manual.

As you follow through this tutorial, you may see that some or all of the files and settings mentioned here are already set in the program. When TrakkStar is installed, a number of sample files are copied to your hard disk, and the initial settings are preset to use these files.

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Scanning Conventional Frequencies

In this example you will scan some of the sample scanning files provided with TrakkStar. This section assumes that you are using the standard display, which is the default the first time you use the program.

1. In the TrakkStar program group, double click on the icon for the radio you installed.
2. If you just installed TrakkStar, scanning should start automatically using some of the sample files. If it does start scanning, you may skip to step 8.
3. Click on the **File** menu, then click on **Scan List**.
4. The Scan List window should appear on the screen:

Scan List - Untitled

Title:

Description:

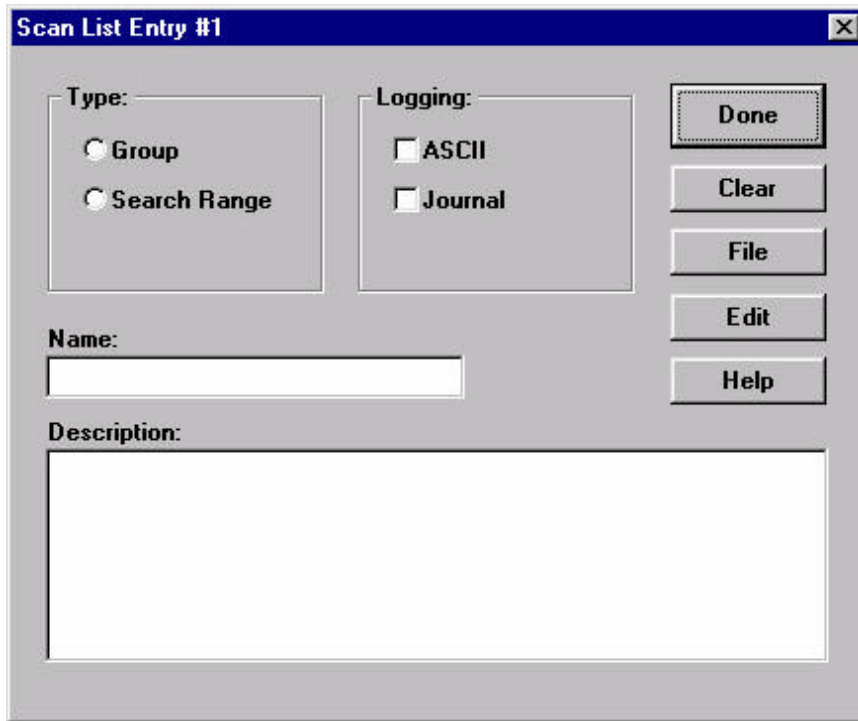
Click on the line number of the entry you wish to change.

	Type	LOG	JNL	Time	File Name
1		<input type="checkbox"/>	<input type="checkbox"/>	50%	
2		<input type="checkbox"/>	<input type="checkbox"/>	50%	
3		<input type="checkbox"/>	<input type="checkbox"/>	50%	
4		<input type="checkbox"/>	<input type="checkbox"/>	50%	
5		<input type="checkbox"/>	<input type="checkbox"/>	50%	
6		<input type="checkbox"/>	<input type="checkbox"/>	50%	
7		<input type="checkbox"/>	<input type="checkbox"/>	50%	
8		<input type="checkbox"/>	<input type="checkbox"/>	50%	
9		<input type="checkbox"/>	<input type="checkbox"/>	50%	
10		<input type="checkbox"/>	<input type="checkbox"/>	50%	

Ok Clear All Help Print

Double click in the white area below either **TYPE** or **FILENAME**.

5. The Scan List Entry dialog box should appear on the screen.

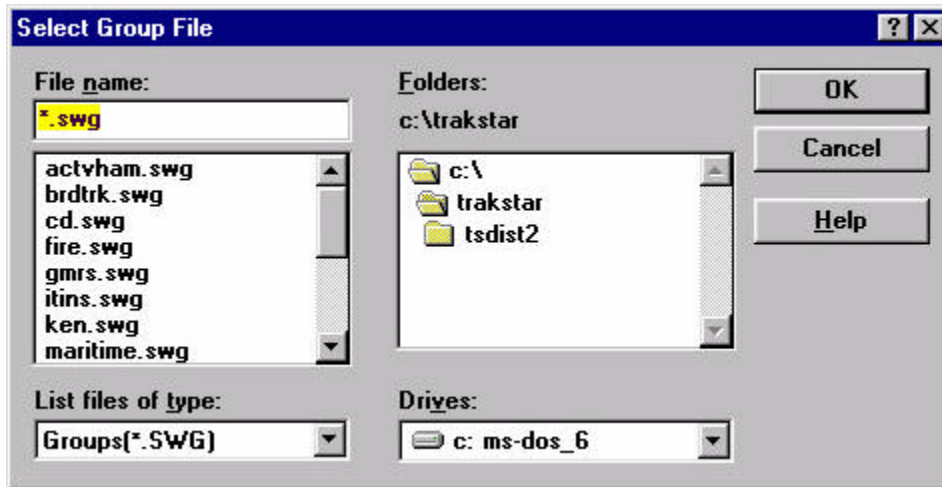


The image shows a Windows-style dialog box titled "Scan List Entry #1". The dialog has a blue title bar with a close button (X) in the top right corner. The main area is light gray and contains several controls:

- Type:** A label followed by a group box containing two radio buttons: ☐ **Group** and ☐ **Search Range**.
- Logging:** A label followed by a group box containing two checkboxes: ☐ **ASCII** and ☐ **Journal**.
- Name:** A label followed by a single-line text input field.
- Description:** A label followed by a multi-line text input area.
- Buttons:** A vertical stack of five buttons on the right side: **Done** (with a dotted border), **Clear**, **File**, **Edit**, and **Help**.

Click the **Group** radio button. This is located in the top left section of the screen, which is titled **Type:**.

6. A standard Windows file dialog will appear with some .SWG files listed:

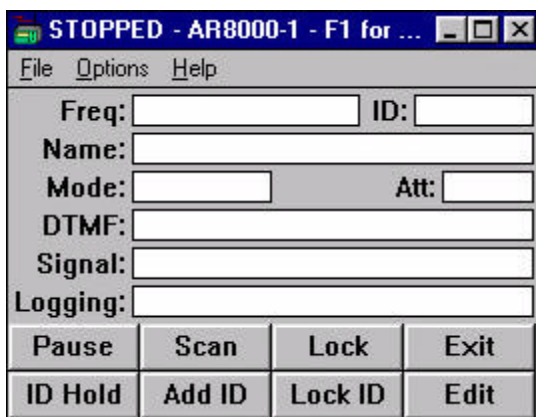


These files are TrakkStar group files, which contain lists of frequencies. The files listed are the samples included with TrakkStar (unless you have already created some yourself.)

7. Select *FIRE.SWG* and click on **OK**. Now click on **DONE** to exit the Scan List Entry dialog. The *FIRE.SWG* should now be listed in the scan list. The Scan List window has 25 slots in it, and each slot can have either a Group or Range file. This is significant, since it means that you can combine up to 25 different frequency lists or search ranges and scan them together.

8. Close the Scan List window by clicking on the **OK** button.

9. You should now have the scanning status window on your screen.



When a signal is received the frequency and other information is displayed here. Note that the TrakkStar sample files may not have frequencies that are active in your area, so don't expect to hear too much (yet).

10. Click on the **Options** menu, and then click on **Tactical display**.

The screenshot shows a software window with a blue title bar. On the left, there are input fields for 'Freq:', 'ID:', 'Name:', 'Mode:', 'Att:', 'DTMF:', 'Signal:', and 'Logging:'. Below these are four buttons: 'Pause', 'Scan', 'Lock', and 'Exit'. Further down are 'ID Hold', 'Add ID', 'Lock ID', and 'Edit'. At the bottom left are 'File', 'View', 'Options', and 'Reset'. The main area displays a list of channel information with columns for frequency, ID, S-number, and name. The list is as follows:

Freq	ID	S	Name
856.4875M	8944	S107	EMS to
860.9875M	4240	S069	Davie C
856.4875M	8944	S110	EMS to
855.2375M	10512	S104	Ch. 2
868.0625M	80	S034	Unknov
867.7125M	272	S024	Ch. 24
852.7375M	4784	S083	Ch 1.
860.9875M	4784	S082	Ch. 20
860.7375M	8944	S052	EMS to
859.7125M	8880	S083	EMS to
858.3625M	14160	S099	Ch. 9
867.7125M	176	S000	Ch. 24
860.2375M	8208	S057	Browar
858.4875M	8944	S069	EMS to

This will change the display to a large version, which displays the channel information, and the activity log.

11. Press the **View** button to change back to the standard display if you want to conserve screen space.

12. Press the **Exit** button if you want to stop scanning, and exit the program.

Searching a Range of Frequencies for Activity

This section assumes that you have already started the TrakkStar program, and are at the main scanning window.

1. Click on the **File** menu, then click on **Scan List**.
2. The Scan List window should appear on the screen:

Scan List - Untitled

Title:

Description:

Click on the line number of the entry you wish to change.

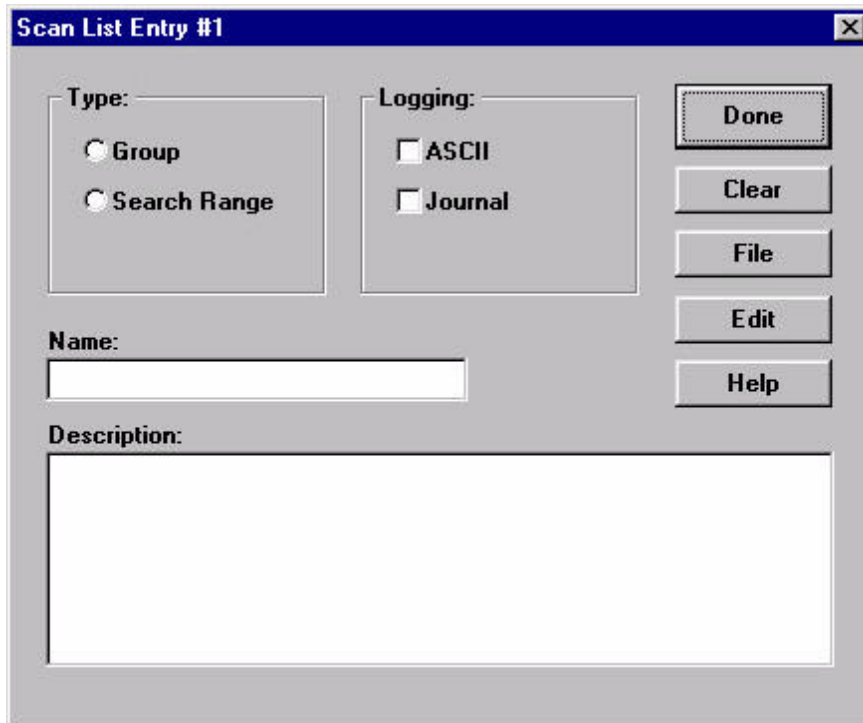
	Type	LOG	JNL	Time	File Name
1		<input type="checkbox"/>	<input type="checkbox"/>	50%	
2		<input type="checkbox"/>	<input type="checkbox"/>	50%	
3		<input type="checkbox"/>	<input type="checkbox"/>	50%	
4		<input type="checkbox"/>	<input type="checkbox"/>	50%	
5		<input type="checkbox"/>	<input type="checkbox"/>	50%	
6		<input type="checkbox"/>	<input type="checkbox"/>	50%	
7		<input type="checkbox"/>	<input type="checkbox"/>	50%	
8		<input type="checkbox"/>	<input type="checkbox"/>	50%	
9		<input type="checkbox"/>	<input type="checkbox"/>	50%	
10		<input type="checkbox"/>	<input type="checkbox"/>	50%	

Ok Clear All Help Print

If you want to add to the existing group that is already set up from the previous section, double click in the blank white area below the existing group, in either the **TYPE** or **FILENAME** column. This will add a second scan group (or range).

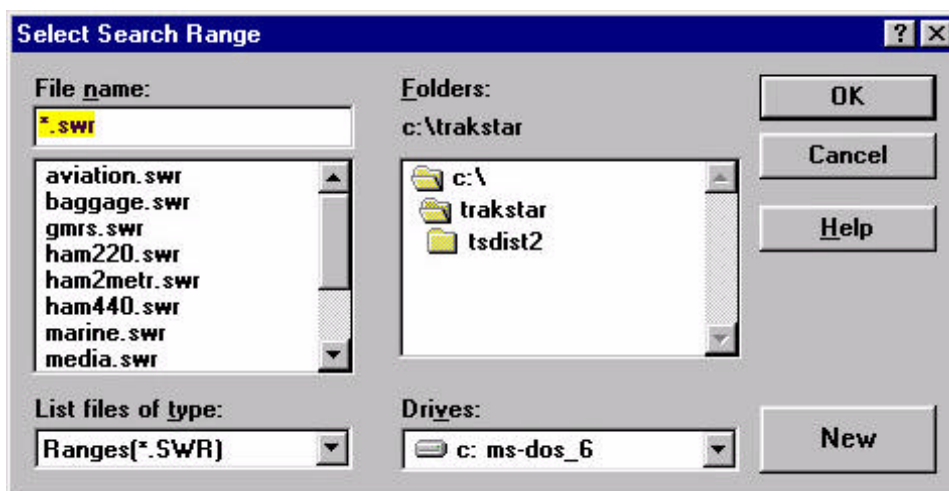
To replace an existing group (or range), simply double click on an existing type, or filename, in the white area, in either the **TYPE** or **FILENAME** column.

3. The Scan List Entry dialog box should appear on the screen.



Click the **Search Range** radio button. This is located in the top left section of the screen, which is titled **Type:**.

A standard Windows file dialog will appear with some .SWR files listed:

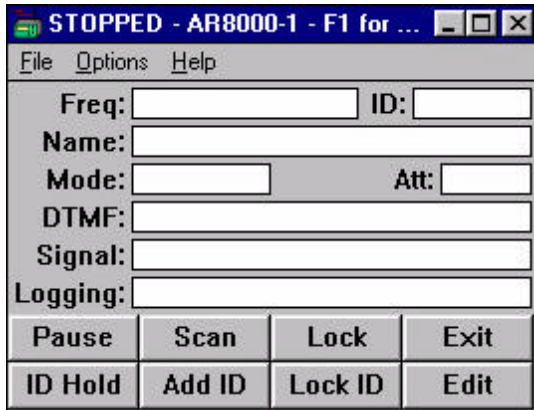


These files are TrakkStar search ranges, and contain frequency bands. The files listed are the samples included with TrakkStar (unless you have already created some yourself.)

4. Select *AVIATION.SWR* and click on **OK**, then click on **DONE** to exit the Scan List Entry dialog. TrakkStar will now include the aviation band in the scan list.

7. Close the Scan List window by clicking on the **OK** button.

8. You should now have the scanning status window on your screen.



STOPPED - AR8000-1 - F1 for ...

File Options Help

Freq: ID:

Name:

Mode: Att:

DTMF:

Signal:

Logging:

Pause Scan Lock Exit

ID Hold Add ID Lock ID Edit

If you added to the scan list, TrakkStar will be scanning two files, the FIRE group and the AVIATION search range. Otherwise, it will just be scanning the AVIATION search range.

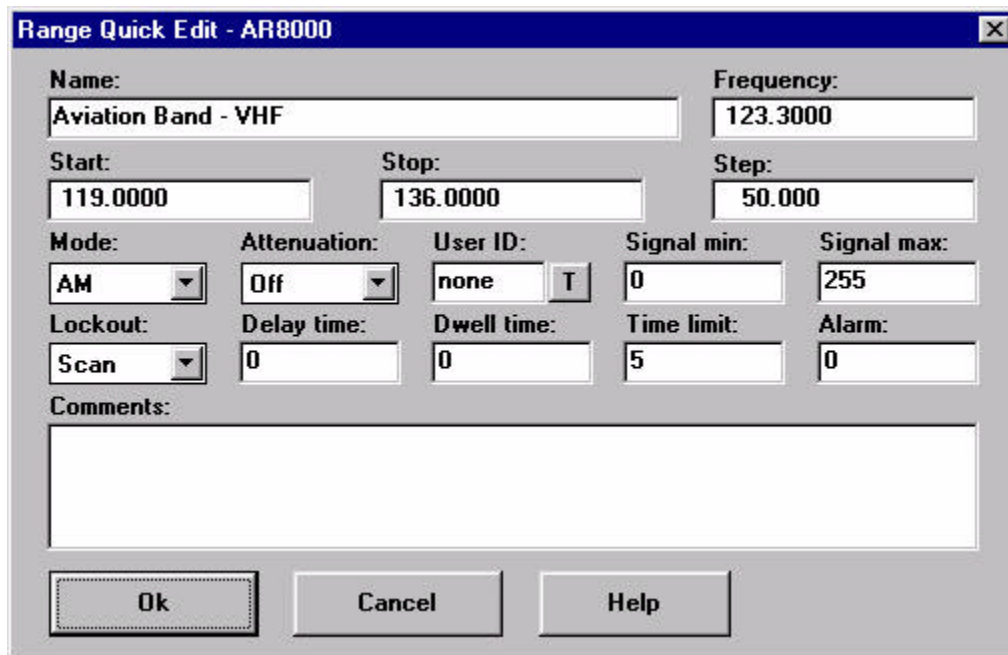
Editing a Search Range

This section will explain how to find out what frequencies are being scanned within an existing Search Range.

There are two different ways to view the details about a search range from within TrakkStar, depending upon what screen you are on at the moment.

From the Scan List Entry window:

1. Press the **Edit** button.
2. The Range Quick Edit window will appear:



The image shows a software dialog box titled "Range Quick Edit - AR8000". It contains several input fields and buttons. The fields are organized as follows:

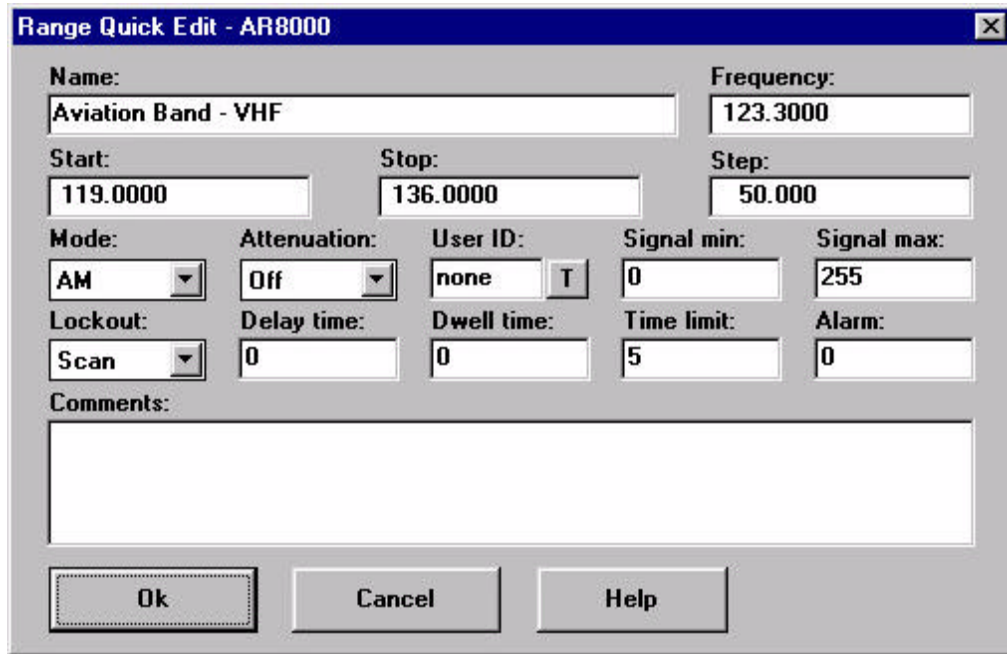
- Name:** A text box containing "Aviation Band - VHF".
- Frequency:** A text box containing "123.3000".
- Start:** A text box containing "119.0000".
- Stop:** A text box containing "136.0000".
- Step:** A text box containing "50.000".
- Mode:** A dropdown menu showing "AM".
- Attenuation:** A dropdown menu showing "Off".
- User ID:** A text box containing "none" and a small "T" button.
- Signal min:** A text box containing "0".
- Signal max:** A text box containing "255".
- Lockout:** A dropdown menu showing "Scan".
- Delay time:** A text box containing "0".
- Dwell time:** A text box containing "0".
- Time limit:** A text box containing "5".
- Alarm:** A text box containing "0".
- Comments:** A large empty text area.

At the bottom of the dialog box are three buttons: "Ok", "Cancel", and "Help".

3. This window contains the properties for the selected Search Range.
4. Make any changes you wish, and press **OK**.
5. Any changes you have made will be reflected immediately.

From the Tactical Display:

1. Right click on the Search Range on the right side of the display.
2. The Range Quick Edit window will appear:



The image shows a software dialog box titled "Range Quick Edit - AR8000". It contains several input fields and buttons for configuring a search range. The fields are organized as follows:

Name:		Frequency:		
Aviation Band - VHF		123.3000		
Start:	Stop:	Step:		
119.0000	136.0000	50.000		
Mode:	Attenuation:	User ID:	Signal min:	Signal max:
AM	Off	none T	0	255
Lockout:	Delay time:	Dwell time:	Time limit:	Alarm:
Scan	0	0	5	0
Comments:				
Ok Cancel Help				

3. This window contains the properties for the selected Search Range.
4. Make any changes you wish, and press **OK**.
5. Any changes you have made will be reflected immediately.

Logging Output from Scanning

1. Begin scanning a group or a range.
2. Select the **Scan List** window and make sure that the **Log** column for the first entry in the list is checked.

Scan List - Untitled

Title:

Description:

Click on the line number of the entry you wish to change.

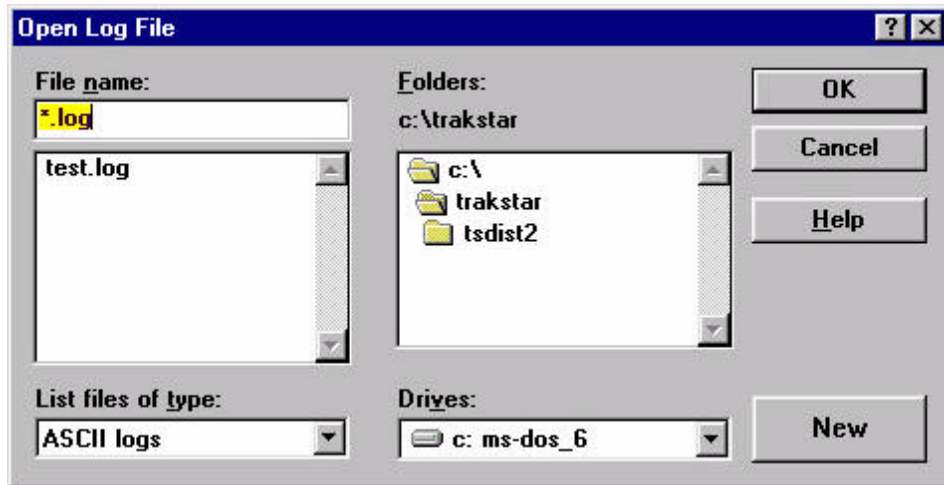
	Type	LOG	JNL	Time	File Name
1		<input type="checkbox"/>	<input type="checkbox"/>	50%	
2		<input type="checkbox"/>	<input type="checkbox"/>	50%	
3		<input type="checkbox"/>	<input type="checkbox"/>	50%	
4		<input type="checkbox"/>	<input type="checkbox"/>	50%	
5		<input type="checkbox"/>	<input type="checkbox"/>	50%	
6		<input type="checkbox"/>	<input type="checkbox"/>	50%	
7		<input type="checkbox"/>	<input type="checkbox"/>	50%	
8		<input type="checkbox"/>	<input type="checkbox"/>	50%	
9		<input type="checkbox"/>	<input type="checkbox"/>	50%	
10		<input type="checkbox"/>	<input type="checkbox"/>	50%	

Ok Clear All Help Print

If it is not, click on the check box to activate it. When active, there will be an **X** in the box.

3. Close the Scan List window by clicking **OK**.
4. From the main scanning screen, select **FILE**, and click on **Open Log**. If there is no **Open Log** selection, click on **Close Log**, and then select **FILE** again. **Open Log** should now appear.

5. A standard Windows file dialog will appear.



6. Enter a file name in the Open Log File dialog and press **OK**. Be sure not to use an existing filename.
7. The log file is now active. Each time TrakkStar stops on a frequency, it will record an entry in the file. Here is a typical listing from the aviation band:

```
120.6000 Aviation Band 2/12/96 08:47:20 00007 000017.3
121.7000 Aviation Band 2/12/96 08:47:23 00008 000000.7
118.3000 Aviation Band 2/12/96 08:48:48 00009 000002.0
```

The fields are **frequency**, **name**, **date**, **time**, **hit count** and **air time**. If you have a different type of radio, the listing will be similar, but may not include all of the fields mentioned above.

Creating an Active Frequency Journal

Journal Logging allows you to scan a large number of channels, and create another Group file that only contains the active frequencies in your area. While active, TrakkStar will create one entry for each active frequency in a new Group file, whose name you specify, which can be loaded for scanning later. This powerful feature can allow you to find active frequencies in your area, without having to be present.

1. Begin scanning a group or a range.
2. Select the **Scan List** window and make sure that the **Journal** column for the first entry in the list is checked.

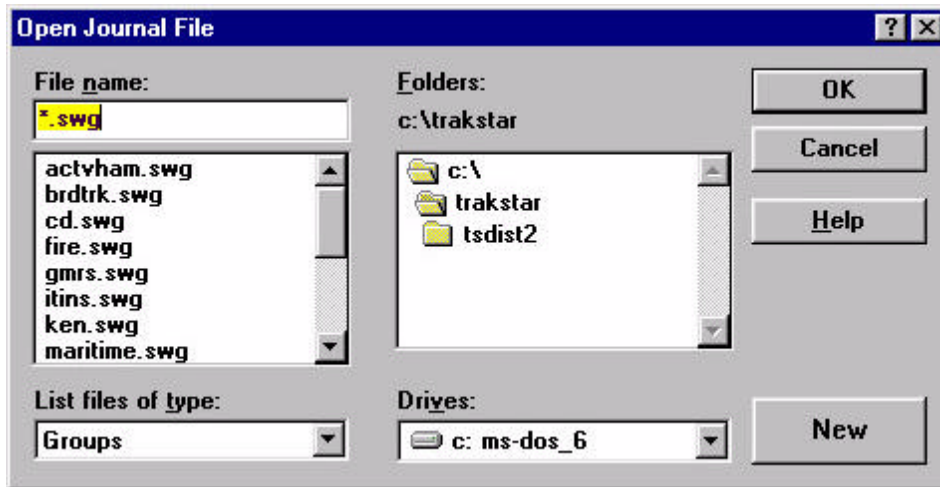
Click on the line number of the entry you wish to change.

	Type	LOG	JNL	Time	File Name
1		<input type="checkbox"/>	<input type="checkbox"/>	50%	
2		<input type="checkbox"/>	<input type="checkbox"/>	50%	
3		<input type="checkbox"/>	<input type="checkbox"/>	50%	
4		<input type="checkbox"/>	<input type="checkbox"/>	50%	
5		<input type="checkbox"/>	<input type="checkbox"/>	50%	
6		<input type="checkbox"/>	<input type="checkbox"/>	50%	
7		<input type="checkbox"/>	<input type="checkbox"/>	50%	
8		<input type="checkbox"/>	<input type="checkbox"/>	50%	
9		<input type="checkbox"/>	<input type="checkbox"/>	50%	
10		<input type="checkbox"/>	<input type="checkbox"/>	50%	

Ok Clear All Help Print

3. If it is not, click on the check box to activate it. When active, there will be an **X** in the box.
4. Close the Scan List window by clicking OK.
5. From the main scanning screen, select **FILE**, and click on **Open Journal**. If there is no **Open Journal** selection, click on **Close Journal**, and then select **FILE** again. **Open Log** should now appear.

6. A standard Windows file dialog will appear.



7. Enter a file name in the Open Journal File dialog and press **OK**. Be sure not to use an existing filename.
8. The Journal file is now active. Each time TrakkStar stops on a frequency, it will record an entry in the file.
9. When you want to stop storing active frequencies, select **FILE**, and click on **Close Journal**.
10. The new frequency Group can now be loaded and scanned.

Creating a Frequency List

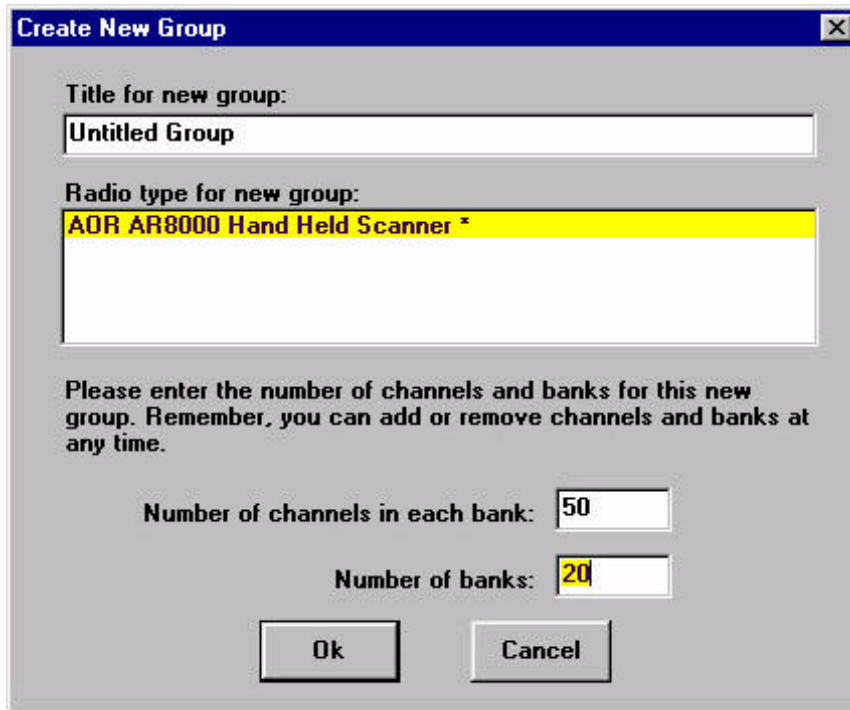
So far, all of the frequencies we've used are from the samples included with TrakkStar. In this example we will create a new frequency list with the **Data Manager**.

1. Double click on the **Data Manager** icon in the TrakkStar program group.



2. Click on the **File** menu, then select **New** and then **Group**.

3. A Create New Group dialog box will appear.



Create New Group

Title for new group:
Untitled Group

Radio type for new group:
AOR AR8000 Hand Held Scanner *

Please enter the number of channels and banks for this new group. Remember, you can add or remove channels and banks at any time.

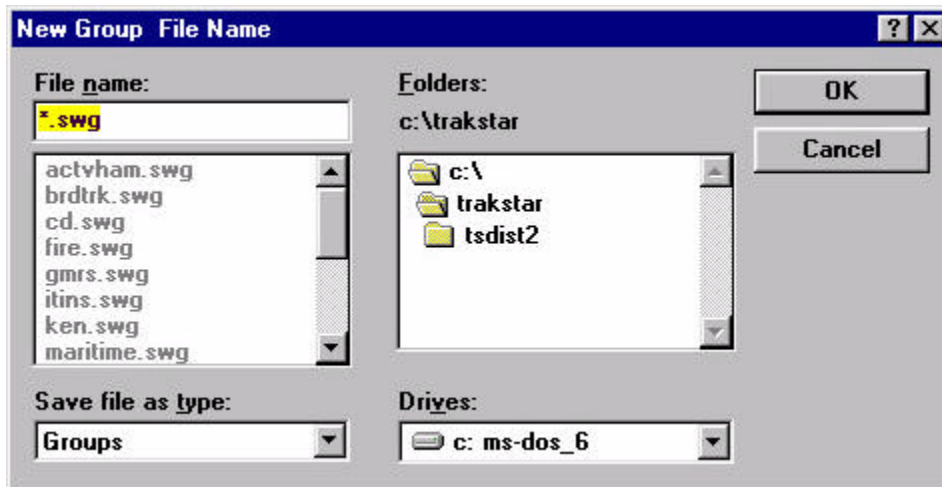
Number of channels in each bank: 50

Number of banks: 20

Ok Cancel

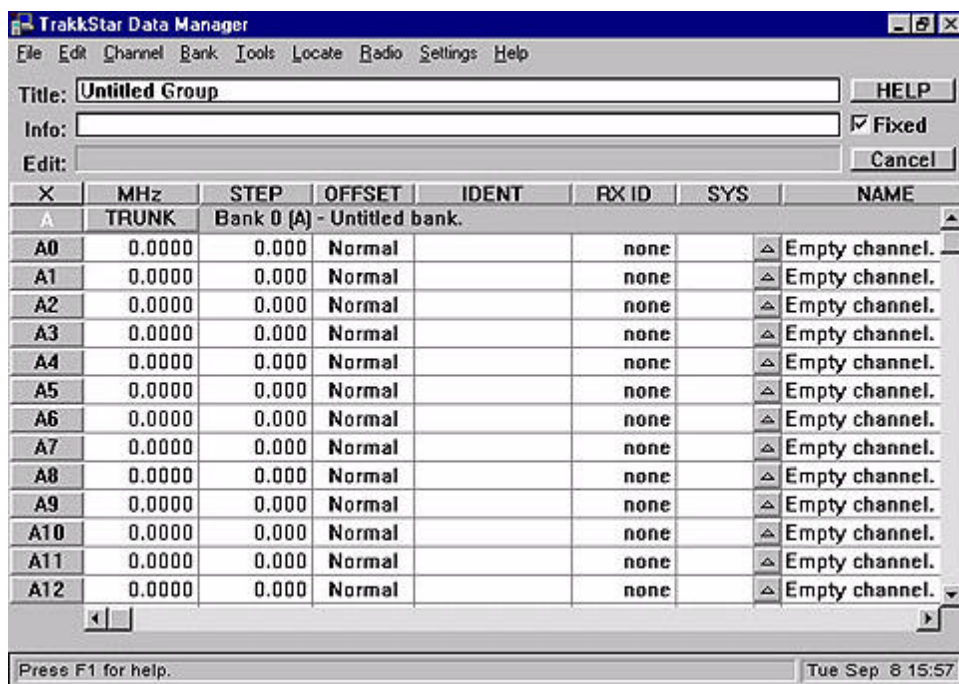
4. Give the group a title, in the **Title for new group:** field.
5. The radio you are currently configured for will be listed in the section titled **Radio type for new group:** .
6. Enter the number of channels per bank, and number of banks that you desire.
You can always change these settings later, so if you don't know exactly how many you will need, you can leave them at the default settings.
7. Press **OK** to continue.

8. A standard Windows dialog will appear, called **New Group File Name**.



Select a name for the group. Be sure not to use an existing name.

9. Press **OK** to continue.
10. After a moment, the newly created Group window will appear.



The rows in this window are channels, and the various columns are frequency, channel number, name and other information.

11. Double click on the first line under the **MHz** column. The Edit box above will become active, and the cursor will be in place, ready for you to enter a frequency.
12. After entering the frequency, press the **TAB** key to move across the grid until the **NAME** column is highlighted.
13. Enter a name for this channel and press **ENTER**.
14. Repeat steps 11 through 13 for additional channels, moving down a line each time.
15. When you are finished entering frequencies, click on **File** , and then **Save**.

Creating a Search Range

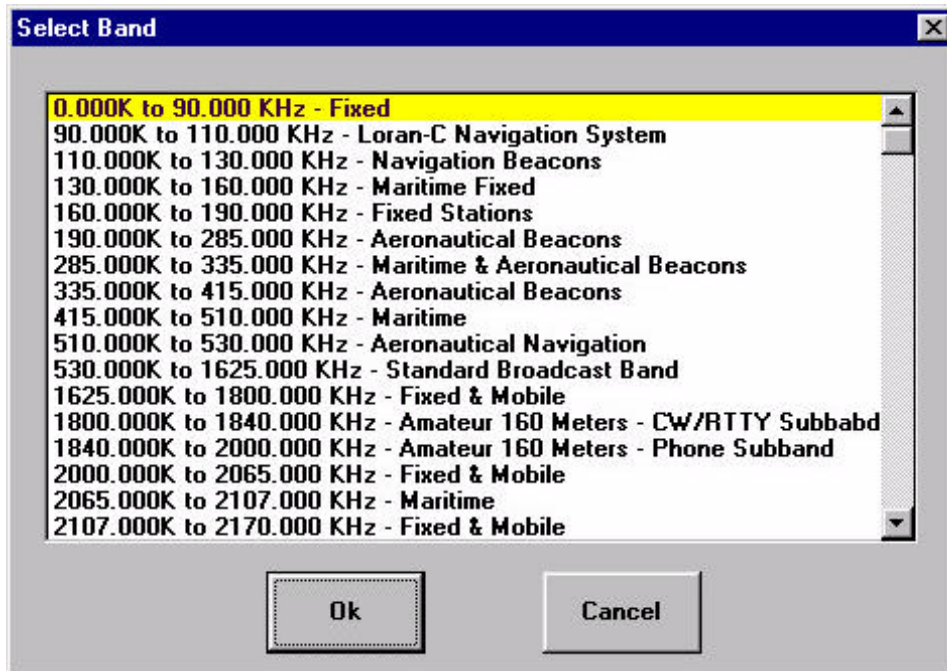
In this example you will create a new search range with the **Data Manager**.

1. If you are not already in Data Manager, start it by double clicking on the **Data Manager** icon in the TrakkStar program group.



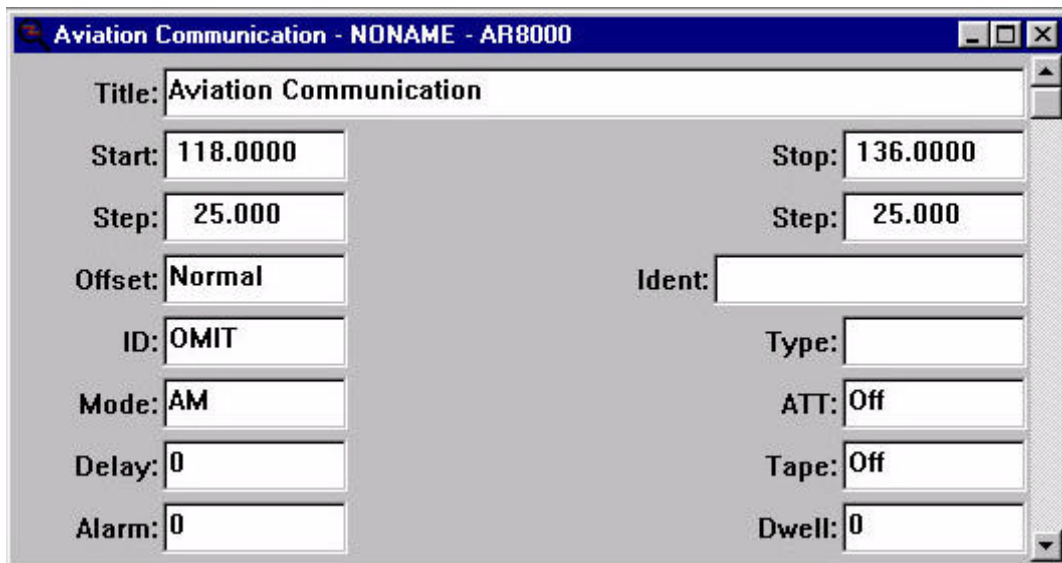
2. Click on the **File** menu, then click on **New** and then **Search range**.

3. A Select Band dialog will appear.



Scroll through the list and select a band that is the same or close to what you want, and then press **OK**.

4. A window with the band name as a title appears.

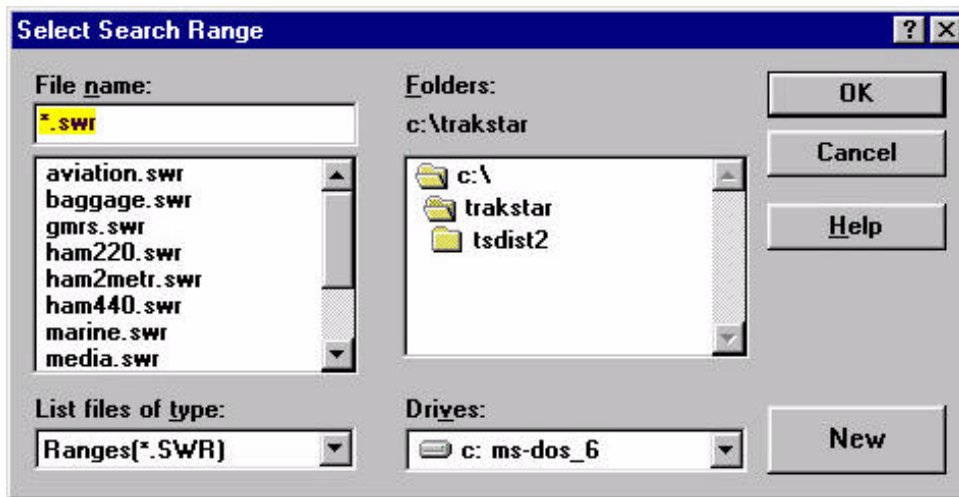


The controls in this window are the start, stop and step size, as well as other radio specific settings.

5. Make any changes to the fields in this window. Some fields are multiple choice fields, and can be changed by simply clicking on the field. For example, Mode is a multiple choice field which can be toggled though AM, FM, etc.

7. Click on the **File** menu, and then on **Save As**.

8. In the Save File dialog, enter a name for your new range and click **OK**.



Background Scanning

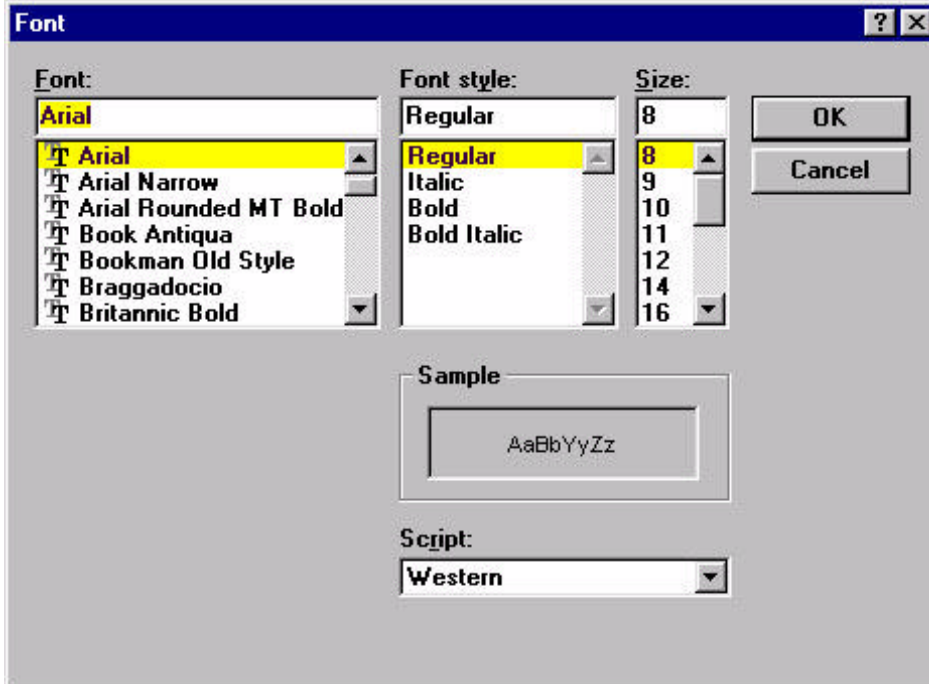
TrakkStar was designed to help you scan and use your PC for other tasks at the same time.

If you wish, you can simply minimize the window, and continue scanning in the background. However, if you wish to still have some controls available, do the following:

1. Start scanning something.
2. Click on **Options**, then **Mini status window**.
3. A small window will appear with four buttons. For now, move this window out of the way somewhere on your screen.



4. Click on **Options** then **Font selection** then **Mini status window**.
5. A standard Windows font selection dialog box appears.



6. Using the controls in this dialog, select the smallest font that is readable on your display. Arial, 8 point is a good starting point. If this is too small, select a different font or point size.
7. When you have a small font selected, press **OK**.
8. The text in the small window will change to the new font. Using the mouse, reduce the size of the small window as much as possible to conserve screen space.
9. On the main scanning status window, press the **minimize** button (down arrow, upper right corner).
10. At this point, scanning is taking place in the background, and you have almost all of the desktop area available for running other Windows applications.
11. To remove the mini status window, click on it's **HIDE** button.

Scanning Trunked Frequencies

Scanning trunked systems is similar to conventional scanning, but additional steps are necessary.

1. Double click on the **Data Manager** icon in the TrakkStar program group.
2. Click on the **File** menu, then click on **New** and then **Group**.
3. A Create New Group dialog box will appear.

Create New Group

Title for new group:
Untitled Group

Radio type for new group:
AOR AR8000 Hand Held Scanner *

Please enter the number of channels and banks for this new group. Remember, you can add or remove channels and banks at any time.

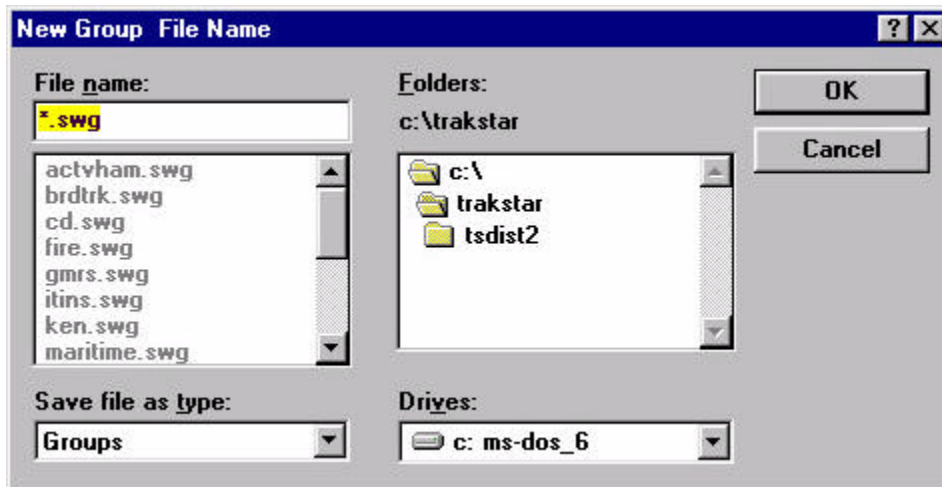
Number of channels in each bank: 50

Number of banks: 20

Ok Cancel

4. Give the group a title, in the **Title for new group:** field.
5. The radio you are currently configured for will be listed in the section titled **Radio type for new group:** .
6. Enter the number of channels per bank, and number of banks that you desire.
You can always change these settings later, so if you don't know exactly how many you will need, you can leave them at the default settings.
7. Press **OK** to continue.

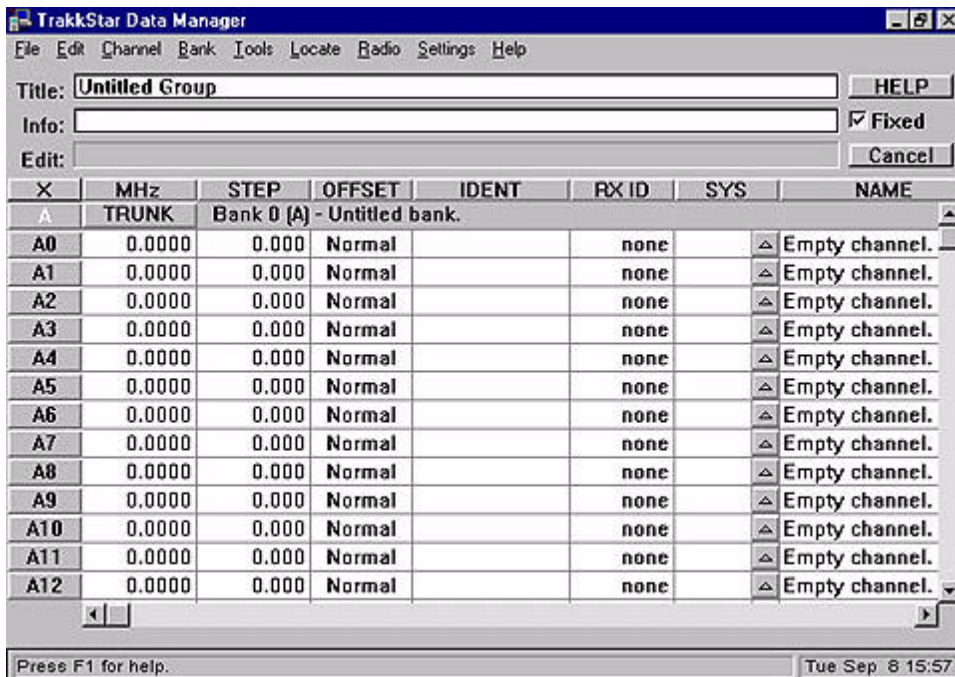
8. A standard Windows dialog will appear, called **New Group File Name**.



Select a name for the group. Be sure not to use an existing name.

9. Press **OK** to continue.

10. After a moment, the newly created Group window will appear.



The rows in this windows are channels and the various columns are frequency, channel number, name and other information.

11. Double click on the first line under the **MHz** column. The Edit box above will become active, and the cursor will be in place, ready for you to enter a frequency.
12. After entering the frequency, press the **TAB** key to move across the grid until the **NAME** column is highlighted.
13. Enter a name for this channel and press **ENTER**.
14. Press the **TAB** key until the "**SYS**" column is highlighted.
15. Click in the edit box until the desired system type is shown. For trunking, this should be **Type I**, **Type II** or **LTR**.
16. Repeat steps 5 through 11 for each additional trunk group channel.
17. Scroll up to the top of the group. Click on the **TRUNK** button located in the bank header above the frequencies you just entered. A pop-up menu will appear.

Fleet Map - Bank A - Untitled bank.

System Type

☐ Non-trunked ☐ Type II
☒ Type I: ☐ LTR

Enter fleet map size codes for this bank. Note that S-12 can only be assigned to Blocks 0, 2, 4 or 6, S-13 can only be assigned to Blocks 0 and 4, and S-14 can only be assigned to Block 0. Please refer to the BC-895XLT appendix for more information on programming user defined fleet maps.

Double click on the size code you want to change.

Block	Size Code	Fleets	Sub Fleets	IDs	Blocks Used
0	S-0	-	-	-	1
1	S-0	-	-	-	1
2	S-0	-	-	-	1
3	S-0	-	-	-	1
4	S-0	-	-	-	1
5	S-0	-	-	-	1
6	S-0	-	-	-	1
7	S-0	-	-	-	1

Select **Fleet map and system type**. In the **System type:** section, which is in the upper left section, select the proper type of system, **Type I**, **Type II** or **LTR**. Note that the system type selected here **MUST** be the same as the type selected for each channel.

18. Click **OK** to exit the dialog box.

19. To finish, select **File**, then **Save**.
20. To scan this group, select it into the Scan List during scanning.
21. During scanning of this trunk group, talk group ID codes will appear in the ID field.
To add IDs to the ID scan list, press the **ADD ID** button. The ID scan list is used for limiting which talk groups you want to scan. It only has an effect when **Closed Mode** is active. If you only want to lock onto one group, just click **ID HOLD** whenever you hear something you want to follow, and then click **SCAN** to resume normal scanning of all talk groups.

Frequently Asked Questions (FAQ)

Why do I have to create files for frequency lists and search ranges? Why can't I just enter them directly while scanning?

TrakkStar uses files to store all scanning data so that related information can be stored and manipulated as a single object. While this may seem more complicated, the payoff is in functionality. For example, a search range file (.SWR) contains not only the search range, but also contains the radio settings, lock out list and the last twenty log reports.

What does the 9B00 error mean?

This is a common problem, and indicates that TrakkStar is unable to establish reliable communication with your radio. Refer to the help section *Troubleshooting Radio Connections* in TrakkStar help.