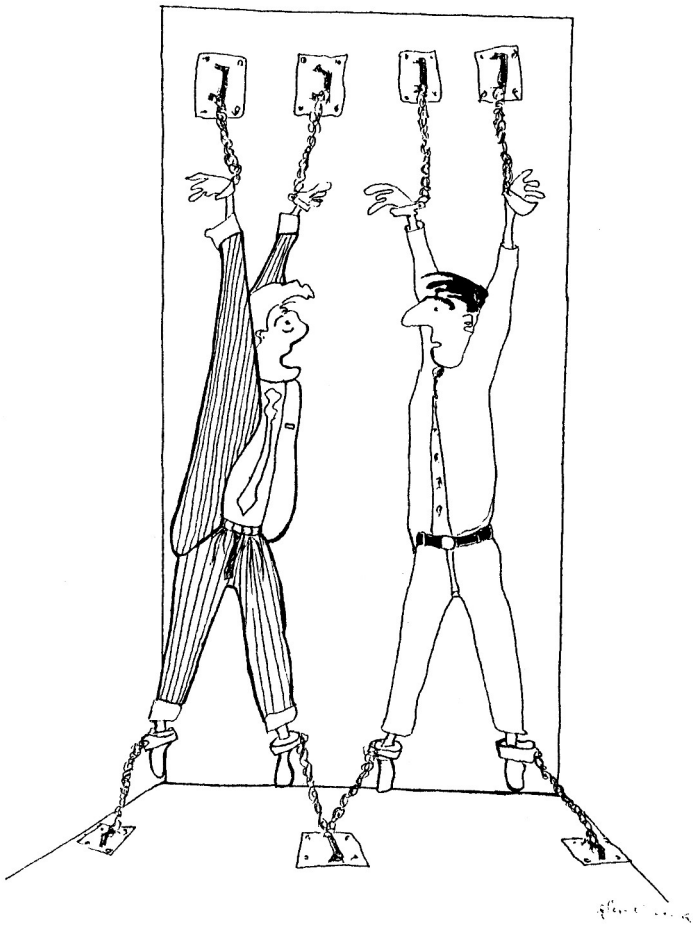


"Did You forget to Do a Backup too?"

We especially want to thank all LOGic customers, who made suggestions, beta tested our updates, and provided encouragement over the years.

And a big “thank you” to Lidia Seda, whose cartoon cannot overemphasize the importance of keeping a backup of your log.

Table of Contents

1. Welcome to LOGic

Welcome to LOGic, the most advanced amateur radio software available. If you are not familiar with LOGic, we recommend reading this to get an overview of its many capabilities.

In addition to this manual, LOGic comes with extensive help built into the program. It covers every topic in the printed manual, plus includes information on LOGic's advanced features. Its appendix contains miscellaneous general information related to LOGic. You can search LOGic's online help for information using Index or Find. Find is particularly useful because it searches every word or combination of words in the help file. Check out this very useful feature of LOGic.

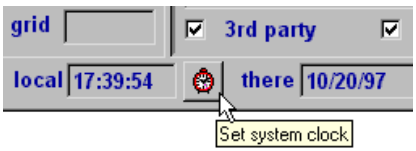
Advanced features, such as radio/rig/packet/digital communication interfaces, internet features, and contesting are covered in LOGic's online help.

This printed manual assumes that you are familiar with the basics of amateur radio and using your computer—running programs, moving and copying files, manipulating windows, etc. If you are unfamiliar with Windows or using your computer, please review the Windows manual or read one of the many books available on the subject.

Our web site contains instructional videos. Visit http://www.hosenose.com to view.

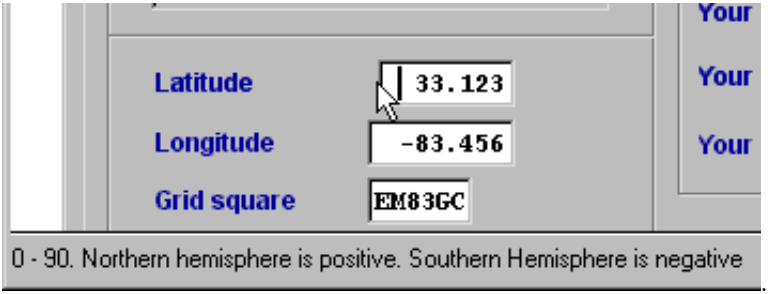
1.1. Getting Help

Assistance is readily available to help you enjoy LOGic. LOGic has comprehensive online help. Most windows have a help button. Click it to display the appropriate section of this help file. Be sure to press the {<<} or {>>} buttons to view the previous or next section, which may be applicable.



Many items have *touch help*, also known as *hover text* or *tooltip text*, which are short descriptions and additional info that may be viewed by merely resting the mouse pointer on the object for a few seconds.

Help may also appear on the *status bar* when you move the mouse over an object, or position the text cursor in a field.



Other resources are available to assist you. At our web site you will find information and downloads that may solve your problem.

http://www.hosenose.com

The LOGic Forum should be your first choice when you need help. Here you will find updates, lists of Frequently-asked questions, new reports and contests, etc. The forum allows you to communicate with other LOGic users. The majority of tech support requests we receive could have been resolved by downloading an update or searching the forum.

If you need personal assistance, you may email us at the address at our web site. Attach any files or screen shots that will assist us (LOGic has a built-in screen capture facility—see LOGic's Help. Users of Windows Vista and later may use the Windows Snipping Tool. See Windows help).

When responding to an email we send you, please include a copy of our message in your reply. Otherwise, we probably won't know what you are talking about. You may remember what was said in previous messages, but we won't. We probably get a lot more email than you do!

You may call our tech support line at **770-307-1496**. If your question is difficult to convey in writing or you are not familiar with computers or amateur radio, this may be your best option. When calling, please try to be at your computer, and have it running. We may request your permission to log into your computer so that we may see your screen and control your computer. We may ask you some questions to verify that you have purchased LOGic. If you receive no answer, just try later. *We cannot accept technical support calls on our office line.* Collect calls are not accepted. Please note that we close at noon on Friday.

You may also mail us at:

LOGic Technical Support
Personal Database Applications
1323 Center Drive
Auburn, GA 30011-3318 USA

An SASE is not required, but will speed our reply. As with email, please enclose any files or printouts that will assist us in helping you. Do not mail your only copy of something! Make a backup copy, and send that to us. Please email us if possible. It is much faster, cheaper, and cannot be damaged by the post office.

When corresponding with us, *be sure to fully explain your question or problem,* document the procedures you went through, and attach any screen printouts, etc. that will assist us in helping you. Please ask specific questions. If you simply state that you cannot get LOGic to run or you cannot get LOGic to do such-and-such or do not understand the manual, we will not be able to help you.

If you are reporting a bug, please go to the LOGic forum and make sure you have the latest update installed. Chances are someone else has already reported the bug, and it has been fixed.

It will be very helpful if you determine exactly what to do to reproduce the bug.

Sorry, we cannot help you with general questions or other products not related to LOGic. If you have questions about manipulating Windows – moving, resizing, selecting, etc. – please consult your Windows manual or help file. It has illustrations to help explain these actions. Your local library may have additional books and videos.

1.2. Installation and Setup

There is a video on setting up LOGic at our web site http://www.hosenose.com. Look for the Video link.

1.2.1. System Requirements

LOGic runs on Windows XP and later.

1.2.2. Installation

Insert the LOGic CD-ROM in your drive. If it does not begin to install automatically, double-click your CD-ROM drive to view its contents in Windows Explorer. Double-click SETUP or SETUP.EXE.

The first time LOGic is run, it will generate index files.

If you have User Account Control turned on, Windows may warn you that LOGic will make changes to your system every time you start it. This is normal. To avoid this aggravation from LOGic and most every-

thing else you do on your computer, you may turn User Account Control off. Consult Windows Help.

1.2.3. If you are upgrading from an earlier version of LOGic

LOGic 9 is a complete new program, and does not update previous versions. Do not install LOGic 9 in the same subdirectory as a previous version of LOGic! Install it in a new folder. We recommend the default location chosen by the installation program. Your old version of LOGic will continue to function as usual.

To import your data from versions 5 thru 8, make a backup of your data using Tools/Backup Restore/Backup in LOGic 5 thru 8. You may back up to your C: drive. Run LOGic 9 and select Tools/Backup-Restore/Restore.

If you do not have your old version of LOGic installed and running, and do not have a backup, you can import your LOG.DBF using Tools/Import.

You may copy your custom log forms and reports from LOGic 8. Consult Help.

Consult Help for importing data from versions of LOGic older than 5.

1.2.4. Importing data from other programs

LOGic will import data from most other programs. Most programs provide export in ADIF format, which LOGic can import. After installing LOGic, to go to Tools/Import. There are import options of older programs that do not support ADIF.

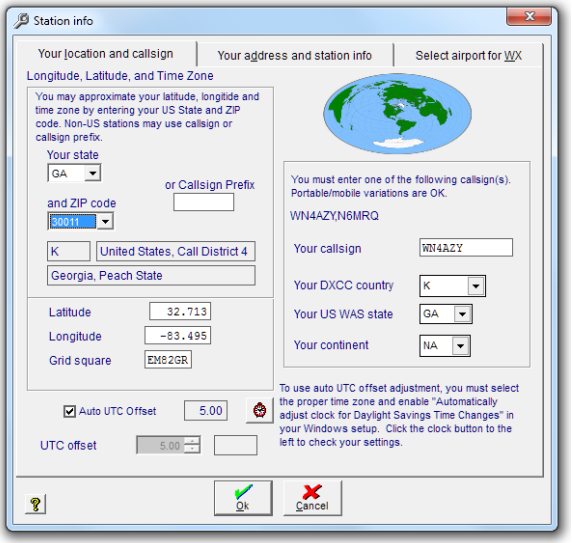
LOGic can also import generic data from spreadsheets and other programs. Search Help for more info.

We will import other data at no cost.

1.2.5. Station info

LOGic needs some basic information about your station to properly calculate DX and direction, and print QSL cards and labels. The Station Info window appears when you first install LOGic. You may run the Station Info form at any time by selecting Tools/Setup on the menu bar.

Information is filled in automatically from your registration, but check to make sure it is all accurate. If you want to change your address and latitude/longitude when operating portable, you may do so.



You may only use LOGic for callsigns that are licensed to you or your immediate family. In the above illustration, this program may only be used by WN4AZY or N6MRQ. Portable variations may be used. For example, WN4AZY/6 or DU2/N6MRQ. Other stations must purchase their own a LOGic license.

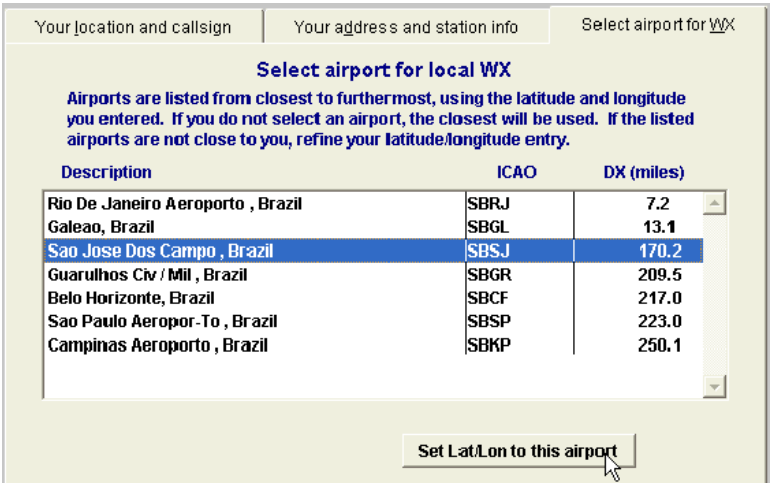
There are several ways to tell LOGic what your latitude and longitude are. By default, your lat/lon will be estimated upon installation using your callsign if a non-US station, and your ZIP code if a US station. If you know your exact latitude/longitude or grid square, you may enter them for precise specification of your QTH. Please note that locations in the Western hemisphere (the Western hemisphere includes North and South America) use *negative* numbers to represent longitude. Stations in the Southern hemisphere (south of the equator) enter negative latitudes. Most road maps do not show the negative sign for their coordinates.

1.2.6. Latitude/longitude approximation

If you do not know your exact latitude and longitude, it can be approximated using tools built into the Station Information form. These approximations will be close enough for all but the most stringent close-in VHF/UHF/SHF work.

If you live in the USA, select **Your State** in the **Longitude, Latitude, and Time Zone** box. Next, select you ZIP code. This feature works for all fifty states, as well as DC, Puerto Rico, Guam, and Mariana.

If you are a DX station, enter your callsign in the **Longitude, Latitude, and Time Zone** box. This will approximate your QTH, using data from LOGic's Prefix table. This is the same information LOGic uses to calculate beam headings to other countries. For larger countries, your latitude/longitude will be approximated down to your call area.



You can also set your lat/lon to that of a nearby airport. This will usually provide a more accurate setting for DX stations than using your callsign. If you are in the US and live closer to an airport than to your post office, you will also want to set your coordinates. To do this, set your lat/lon as close as described above using state/ZIP code or callsign. Then click **Select airport for WX.** Several airports in your area will be listed. Select the one closest to you from the list, then click **Set Lat/Lon to this airport**.

1.2.7. Time Zone

LOGic needs the correct *UTC offset* for your time zone so that it can calculate *UTC* from your system clock. Normally this is determined by the Windows setup of your computer. To use your computer's time zone value, checkmark **Auto UTC offset**.

If you have Auto UTC Offset enabled, LOGic will handle local time changes such as Daylight Savings Time and European Summer time automatically.

IMPORTANT!!! You may operate during the changeover from DST to Standard and back without concern. However, your computer **must** be set to automatically adjust itself for Daylight Savings Time. Click the clock button next to Auto UTC Offset to run your system's control panel Date and Time properties. **Click Time Zone**, and checkmark **Au-**

tomatically Adjust Clock for Daylight Saving Time. If you have Auto UTC Offset checked, and do not do set your computer to automatically adjust itself, the wrong time will be logged during Daylight Savings Time! Your control panel may vary from this illustration, depending on which version of Windows you are running.

If you need to set your UTC offset manually for some reason, consult Help.

1.2.8. Country, state, continent, etc.

You must also enter your callsign, DXCC country, US State if applicable, and your continent. LOGic uses this information for scoring contests. Note that there are two places to enter your callsign. The leftmost is only for DX stations to use to estimate your lat/lon. It is optional. Your callsign must be entered in the righthand Callsign field.

Select the "Your Address and Station Info" tab to specify your name and address that will appear on QSL cards and return address labels. You may also specify a line of additional information about your station, and the default transmitted power to be entered in the log forms.

1.2.9. Airport for Local WX

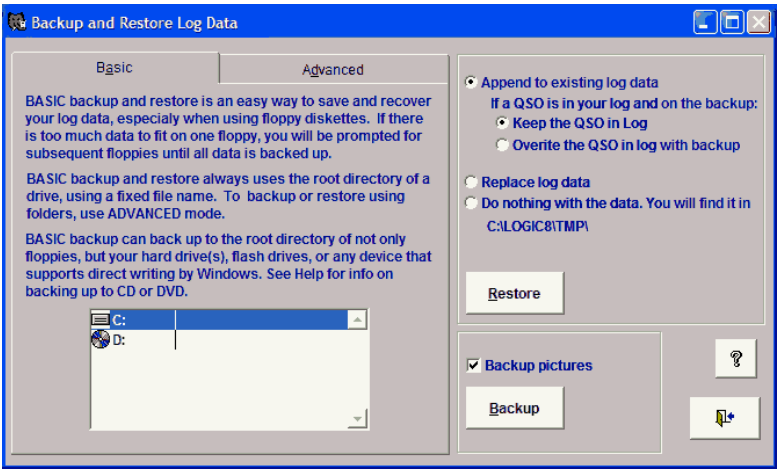
LOGic's web weather lookup will provide your local weather report from a nearby airport. If you do nothing, it will select the closest airport to the latitude and longitude you entered. However, you may want to select a different airport if the closest one stops reporting, or if it provides more frequent updates to NOAA (National Ocean and Aeronautic Administration). Note that not all airports report WX info to NOAA.

Select the OK button to accept your entries. LOGic will update its DX and Direction info tables. This will take about a minute.

LOGic is now ready to use!

2. Backup and Restore

LOGic includes a convenient backup feature that compresses your log and stores it on removable media. Back up your data frequently to protect yourself from hard disk failure, fire, tornados, etc.! Access the Backup and Restore features from the Tools menu.



2.1. Backup

Any drive accessible for writing by Windows may be used for backup. This includes floppies, flash drives, and local and networked hard drives. If backing up to a hard drive, use a different drive than the one LOGic's data resides on to protect you in case LOGic's drive fails!

LOGic will not back up directly to writeable CD and DVD drives. (However, some CD/DVD drives come with special software that permits writing directly from Windows. Check to see if your drive supports this feature. If it does, then LOGic will back up directly to your CD/DVD drive.) These devices require special manufacturer's software to write to them. However, you may back up to your hard drive, then write the resulting logbackup5.pdabackup file to your CD or DVD drive. In most cases you can right-click the file, select **Send To**, then select your CD/DVD drive.

Basic backup and restore backs up only to the root drive of a disk. If backing up to floppies, LOGic's backup will span multiple floppies if necessary. Backup warns you if backup data already exists on the media.

Basic backup does not allow you to back up to a folder or specify a file name. If you want complete control over where the backup data is stored, click the Advanced tab.

When backing up, you have the option to include LOGic's pictures in the backup. This is recommended, of course. However, pictures can be large, and will compress very little or none by LOGic's backup facility. So you may want to turn off Backup Pictures if backing up to a floppy or small flash drive.

2.2. Restore Options

2.2.1. Append

The Append option adds data from your backup to the data in your log. This is excellent for merging data from a multioperator contest (LOGic supports multiuser networking too), or updating your home log with a log from mobile or portable operations.

If the data on the backup was created with LOGic 8 or later, and the same QSO is in LOGic and on your backup, LOGic will not create duplicate entries in your log. It will merge the data. This makes it very convenient if you log on more than one computer, and want to keep them all updated. If a QSO exists on the backup, and the same QSO is already in the log you are restoring to, you have the option to:

- Keep the QSO data that is in your log and ignore the QSO data on the backup. Use this option if the data in your log is more current than the data on the backup.

- Delete that QSO in your log and replace it with the data for that QSO in your log. Use this option if the data on your backup is more current than the backup in your log.

LOGic 9 will restore data from LOGic 5, 6, and 7 backups. However, it will not merge the data as described above. It will add all QSOs in the backup to your log. If you append and end up with duplicate QSOs, there is a program under Tools/Misc Utilities to remove dupes based on callsign, band, and date/time. It will keep the best QSL Received status.

2.2.2. Replace

The replace option deletes all QSO, biographical info, and pictures from LOGic's log, and replaces them with the backup. You will be warned that your log is about to be deleted, and must confirm to continue. Do this **only** if your backup is complete and current, and known to be good. You may test it with the Do Nothing option discussed below.

2.2.3. Do Nothing

You may also restore and have LOGic do nothing with the restored data. It merely unpacks your backup and leaves the files in the **TMP** folder inside your LOGic install folder. LOG.DBF and LOG.FPT contain the log data. LOG_BIO.DBF and LOG_BIO.FPT contain biographical info. LOG_PICTURES.DBF and LOG_PICTURES.FPT contain the picture thumbnails and captions. The pictures themselves are placed in a folder named **LOG_PICTURES**.

This option is good for testing backups to make sure they are readable.

If you restore files that you manually backed up by copying them into the LOGDATA folder, please run the clean option from your start menu to regenerate indexes.

2.3. Important Note About Backup/Restore

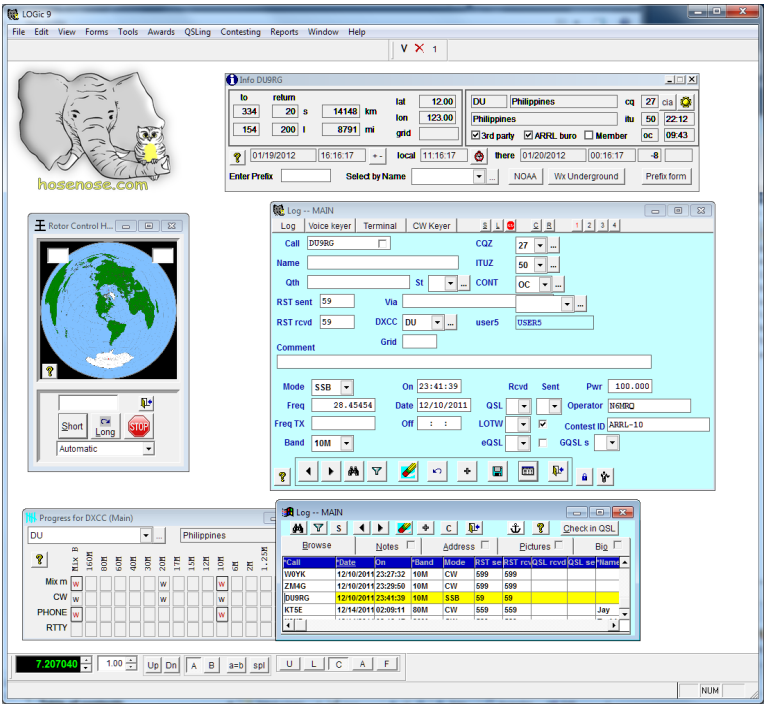
Note that the backup facility backs up only log data! It does not back up changes to reports, log form setups, or other tables. It is recommended that you periodically back up your entire system, including LOGic, using an external hard drive and appropriate backup software. Some versions of Windows include backup and restore features. However, simply keeping a copy of your LOGIC folder (use Windows Explorer) will back up all of LOGic's data, setup, and your customized log forms and reports -- everything you will need to do a complete restore of LOGic.

To easily locate your LOGic folder, right-click your LOGic shortcut icon. Click Properties. Click Open File Location or Find Target. We recommend navigating up to the parent directory, and then copying the LOGic folder

3. Basic Operation

Let's take a few minutes to tour the basic features that you must be familiar with to use LOGic. All of the features discussed here will be presented in depth later in this manual. There is also a video at our web site http://www.hosenose.com Look for the Video link.

Here is a picture of what LOGic might look like in typical operation. The log form is used for entering, retrieving, viewing, and editing log data. The browse form shown here below the Log window displays several QSOs at once. It has several options for organizing and searching your log data. The Info form shows information such as distance, direction, DXCC, country name, time zone, *UTC* , local time at the DX station, your local time, etc.



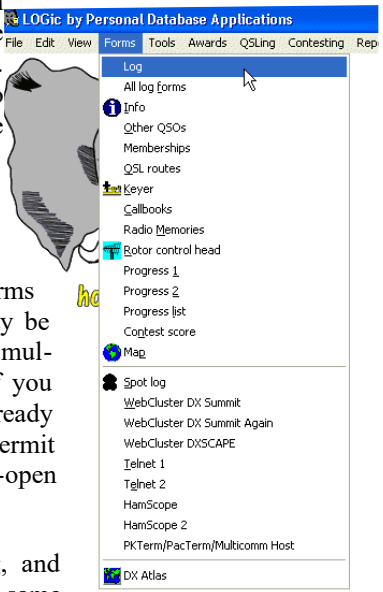
If the log form is not already open, go to **Forms** on the log menu, and select **Log.** A menu of log forms will appear. Select **Main**. If the info form is not open, go to Forms and click **Info**.

Also shown is LOGic's rotor control head, and the control panel for a radio interface. However, this is just a small sample of the forms and options available in LOGic. There are many other forms you may open. There are forms that display packet spots, control your Packet Radio TNC or multimode controller, provide interfaces to internet resources such as Telnet or WebCluster, display awards progress info, show previous QSOs with the station you are currently working, etc.

To log a QSO, click the add button in the log form. Type a call in the callsign field and press {Tab}. Fill out other fields as desired. If you want to print a QSL for this QSO, select Requested for QSL Sent. This flags this QSO so that a card or label will be printed when you run a QSL Card or QSL Label report. See page 80.

3.1. Managing Forms: Forms and Windows Menu

LOGic is a sophisticated program with many features. Many of these features are associated with forms. It is important to understand how to open, close, and otherwise manage forms.



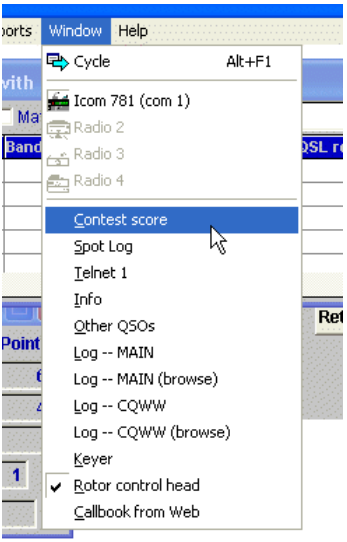
3.1.1. Forms menu

To open LOGic's forms, select Forms on the menu bar. Some forms may be opened multiple times, (unless the multiple forms feature is disabled). If you attempt to open a form that is already open, and that form does not permit multiple instances, the currently-open form will be displayed.

The Awards, QSLing, Contesting, and Reports menus open some of the same forms as the Forms menu.

Some of LOGic's forms cannot be accessed from this menu. Radio interfaces and data terminal forms are opened automatically when you go to Tools/Setup/Misc Ham Setup and specify the COM port to be used, etc.

3.1.2. Window Menu



If you have experimented with LOGic's Forms menu, you have quickly learned that you can have many forms open at the same time. Some may become "lost" behind other open windows. The Window menu provides an easy way to manage your open forms. It lists the titles of all open or minimized forms, and displays a check mark next to the currently active form. You may select another window to be the active window. Just click on the title of the desired form. If the selected form is minimized, it will be normalized.

If the form is positioned beyond the edge of LOGic's main window (this can happen if you reduce the size of LOGic's main window), it will be moved so that a corner will be visible.

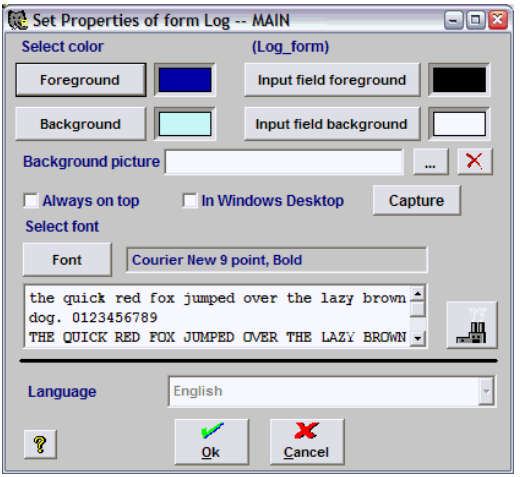
3.1.3. Miscellaneous hints for managing forms

Most forms can be minimized. Minimizing a form shrinks it to a small icon and title bar at the bottom of the main LOGic window. Minimized forms continue to function—you just cannot see their contents. *Normalize* (unminimize) it for immediate viewing. Clicking the leftmost control in the top right hand corner of a window minimizes or normalizes it. You may also normalize a minimized form from the Window menu, or by double-clicking its title bar.

You may find that you have inadvertently opened many instances of the same form. To prevent this, do not use the Forms menu to access a form that is already open. Just click on the form, or if it is hidden behind other windows, use the Window menu. You may disable LOGic's multiple form instance feature. See page 33.

3.2. Basic Form Customization —Font Size and Color

You may easily choose colors and fonts used by a form. Just right-click anywhere in the background area of the form.



Depending on your monitor, video resolution selection in the Windows control panel, and eyesight, you may discover that forms are too large- they do not fit on your screen, or there is not room to have all the forms visible that you desire. Choosing a smaller font will make the window smaller. Or you may desire larger type that is easier to read. Also, experiment with bold and normal font styles.

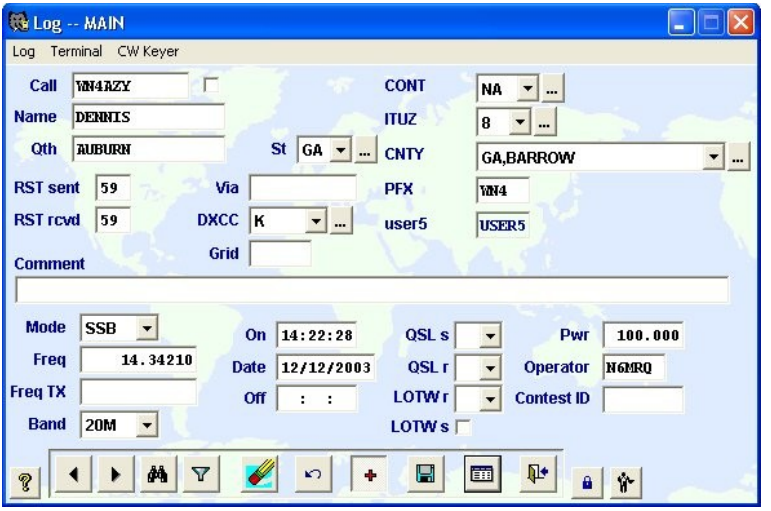
You may also change font name and style. However, this is not recommended for most forms. The boxes where you type your data, called **data fields**, should use a *non-proportional font*. Courier New is the only such True Type font provided with Windows.

Data with a predetermined list of values, such as DXCC, are displayed in dropdown lists. A proportional font is used to conserve screen real estate. The font name (typeface) for these items cannot be changed.

To change color, *right-click* the background area of a form. You may select foreground and background colors for the form and its data fields.

Instead of a background color, you may select a bitmap graphic for your forms. Several are included with LOGic, and you may make your own. Just use the Windows Paint program or other paint program to make a standard .BMP image. It is recommended that you put your background images inside LOGic's **Backgrounds** folder. When making

background graphics, they should be low contrast and be either very light or very dark, so that the text on the form will be legible. After selecting a background, you may want to adjust text colors for maximum attractiveness and readability.

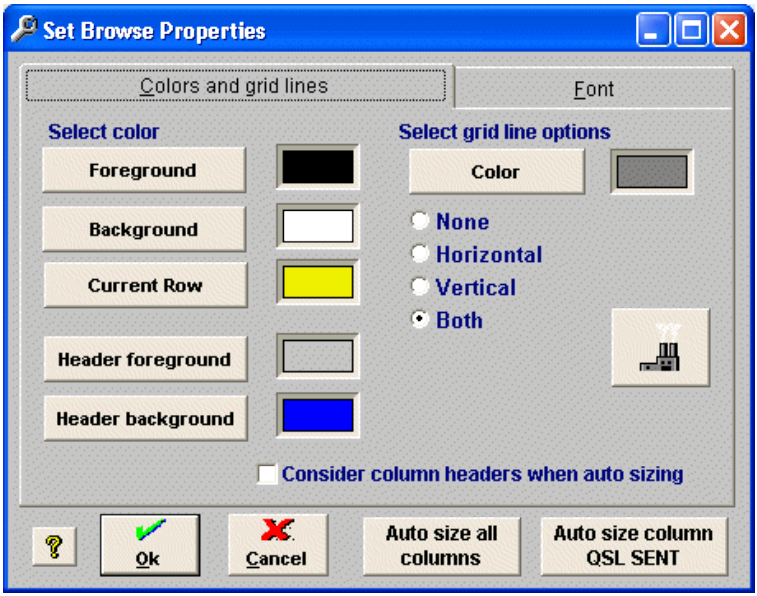


Most of LOGic's windows are normally displayed inside the main LOGic application window. However, most forms may be moved to the Windows desktop so that they may be moved independently of the main LOGic window. Click the Windows Desktop option. This is great for moving a form to a different monitor on a multiple-monitor system. Forms in the Windows Desktop may be made transparent See page 35.

You may make your favorite forms stay on top of other forms by clicking the Always on Top option.

The log form allows even greater customization than discussed here. You may change the size of the window's work area without changing font size, add or remove fields, and drag fields to your desired location. See Designing Your Own Log Forms on page 73.

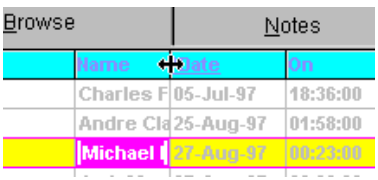
3.3. Grid Customization



LOGic makes liberal use of grids to display data in columnar format. Grids have a number of customization options. *Right-click* a grid to display the grid properties form. You may adjust colors of the foreground, background, current row, and grid lines. You may also control if grid lines are shown or not. You may select only horizontal lines between rows, vertical lines between columns, or both.

You may select any font for a grid. A *proportional* font is desirable to display the maximum amount of data.

You may also adjust column widths, column order, height of headers, and height of data rows. Following are illustrations of adjusting each. For each example, position the mouse as shown, then *drag* as described. (The grid was set to use light colors for these photos so the black mouse cursor will be visible.)

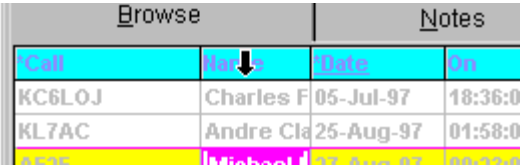


Resize column. Position the cursor on the dividing line to the right of the header to be resized. In this illustration, the Name column is being resized. Drag the line to the left to narrow the column, or to the right to widen the column. It is possible to size a column so that it has no width. The resulting line will

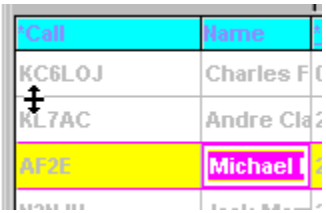
be heavier than normal. You can drag this line to retrieve the column. However, LOGic will automatically adjust zero-width columns to a very narrow column when restarted. It does this so that users will not accidentally lose columns. If you do not want a column to appear, do not reduce it to zero width. Instead, drag the entire column to the right of the visible area of the grid, as described below.

You may automatically resize one or all columns in a grid. To auto-resize one column, right-click it, then click the **Auto size column <name>** button. To resize all columns, click the **Auto size all columns** button. Auto sizing only considers the data currently displayed in the grid. Display of longer data that may exist elsewhere in the database will be truncated when it is displayed, until you resize the column again.

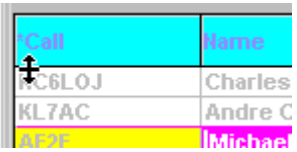
Move column. To move a column, position the cursor in the middle of the column header. Drag the column right or left as desired. To get rid of a column that you do not want, simply drag it to the extreme right of the grid so it is off of the visible portion of the grid. You can still see these columns by panning to the right using the bottom scroll bar of the grid.



Resize row. Position the mouse pointer as shown on the line below the first row on the grid. The mouse pointer must be close to the left edge of the grid. Drag the line down to make all rows wider. Drag up to make all rows narrower.



Resize header. Change the height of headers by positioning the mouse pointer as shown on the line below the leftmost header. The mouse pointer must be close to the left edge of the grid. Drag the line down to make the header row wider. Drag up to make the header row narrower.



3.4. Data Access Forms

See also: Actions, page 26.

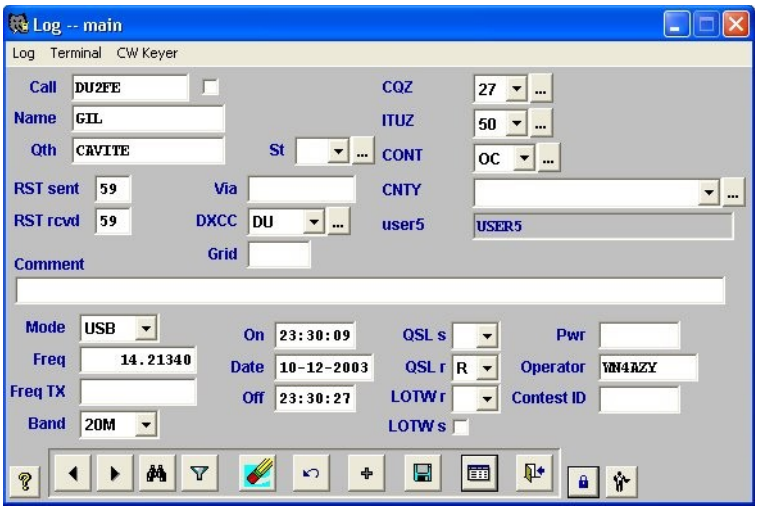
LOGic provides you with the most powerful yet convenient screens for accessing your data. The same set of screens is used for entering, editing, searching, and viewing your data.

If the log form is not already open, click on Forms on the menu bar, then Log. When the file selector appears, select MAIN.LOGFORM. You may see other files listed as well. You can also create your own log forms to be added to this list, but for now select MAIN.LOGFORM. This is a basic log form that has the fields and layout needed for general all-around logging.

LOGic's other data forms (QSL routes, Lists, Band Table, etc.) operate similarly to the log form. Once you learn to use the log form, you will know how to use LOGic's other forms.

Each data access form has two windows--a **Browse** form and a **Data** form.

3.4.1. Data form

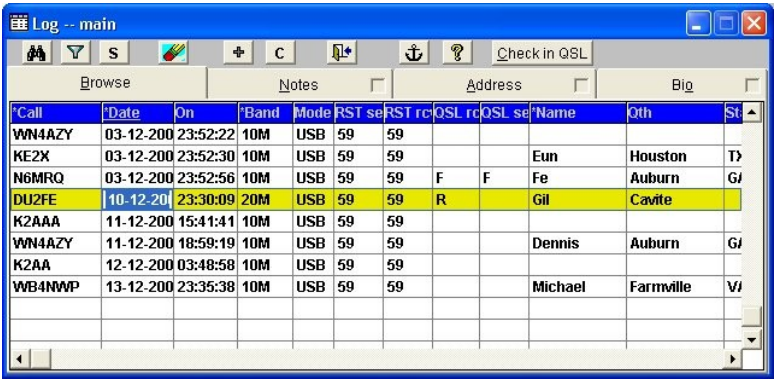


The **Data** form shows one record at a time, but displays all fields of the record. It is also used to change your data or enter new data. Navigate the data window by clicking on the desired field with the mouse, or using {Tab} to move to the next field, or {Shift+Tab} to move backwards

through fields. Touch Help is available for most fields. Some fields display additional info on the *status bar* .

You may right-click text (those that aren't dropdown lists) to get an edit menu, which permits you to cut, copy, and paste text.

3.4.2. Browse form



*Call	*Date	On	*Band	Mode	RST se	RST rc	QSL rc	QSL se	*Name	Qth	St
WN4AZY	03-12-200	23:52:22	10M	USB	59	59					
KE2X	03-12-200	23:52:30	10M	USB	59	59			Eun	Houston	TX
N6MRQ	03-12-200	23:52:56	10M	USB	59	59	F	F	Fe	Auburn	GA
DU2FE	10-12-20	23:30:09	20M	USB	59	59	R		Gil	Cavite	
K2AAA	11-12-200	15:41:41	10M	USB	59	59					
WN4AZY	11-12-200	18:59:19	10M	USB	59	59			Dennis	Auburn	GA
K2AA	12-12-200	03:48:58	10M	USB	59	59					
WB4NWP	13-12-200	23:35:38	10M	USB	59	59			Michael	Farmville	VA

The **Browse** form uses a grid to show several records simultaneously. It is a great tool for visually scanning your data. It is invaluable for network operations. You may scroll through it with a mouse or with the {Page Up} and {Page Down} or {Up Arrow} or {Down Arrow} keys. Click on a record to display it in detail in the data window. The currently-selected record is highlighted. Most browse forms have more data than will fit on the grid. Pan sideways with the bottom scroll bar to see all fields. The grid has several customization options. The browse form may be resized to take up less space or to view more data.


The browse window may be anchored to the bottom of the data window. To anchor it, click the anchor button until it is depressed or pushed in on the browse window. Having the browse window anchored makes organizing windows easier if you open several log forms.

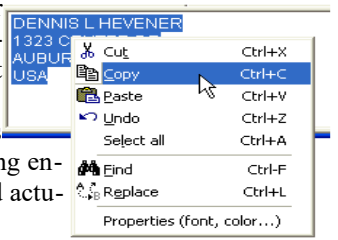

To unanchor it so that it may float freely inside the LOGic *application window*, click the anchor button so that it is not pushed in .

You may close the browse form if it is not needed. You cannot close the data form without also closing the browse form, but you may *minimize* it.

Note that the browse and data windows are coordinated. When you select a different record while in one window, the other window is automatically updated to show the new record.

Columns displaying *indexed* fields are marked with an asterisk (*). *Double-click* a marked column heading to change the database order. For example, if you double-click the Call column, the data will be reordered to display alphabetically by callsign. If you double-click the date field, the database will be ordered chronologically. The column currently indexed is indicated with an underlined caption. You may click the search button to search indexed columns.

Some browse forms have edit fields for accessing freeform notes that are associated with a record. *Right-click* to edit (copy, paste, etc), or change font, color, etc. The check marks on the index tabs allow you to determine if there is anything entered without having to select the tab and actually look at the field.



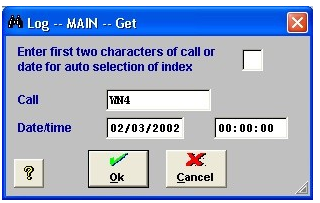
3.5. Actions

LOGic's data access forms are capable of performing many actions – adding a new record, changing existing data, searching your data, etc. The control panel at the bottom of the data window activates the various actions.

Here is a summary of these actions. Some are discussed in more detail in other sections. Each action may be performed with a keyboard shortcut. *Touch help* will reveal the keyboard shortcut. Additional information for each button may appear on the *status bar*. Also note that most of these actions will not work until you have entered some data into your log. Obviously, you cannot erase or go to the next or previous record when there is no data in the log.

The **Next** and **Previous** actions page through the log. The current database order is used. See **Get** below.

The **Get** action allows simple and instantaneous lookup of a



QSO by entering either the callsign or date/time of the QSO. When the Get form is open, the cursor is positioned in the small field at the top of the form. It analyzes your input and automatically selects the Call or Date/Time field. You do not need to enter an exact call or date/time. The closest match will be found.

When GETting, the database is reordered according to the field that you searched. For example, if you searched on Call in the log form, the log will be switched to Callsign order. If you searched on Date/Time, the database will be switched to Chronological order. You may easily see how your database is ordered by looking at the browse form. The header of the column that the database is currently ordered by will be underlined.

Filtering allows you to search on any field or combination of fields. It is a very powerful tool for searching your data. See the section on Filtering (page 29) for more details.

The **Erase** action permanently removes a record from your database. You are normally asked to verify that you want to erase, but you may turn this safety feature off. See Application Options on page 33.

Then **Undo** action reverses any changes that you have made to your data. If you undo while adding a record, the new record is discarded.

Add new record clears the data form and adds a new, blank record to the database. The cursor is placed in the Call field. The button changes color to indicate that an add is in progress.

Save writes changes or new records to disk, and attempts to flush all disk buffers. You do not have to press this button to save your changes! LOGic automatically saves changes for you when you exit the form or access a different record. This button merely provides a way to assure that data has been saved. For example, you will want to click it if you are in the middle of adding or changing a record, but must leave your computer before finishing. This will greatly lessen the chance of data loss should the power fail or your computer crash in your absence.

If you do not like LOGic's automatic save feature, you may effectively disable it. See page 33.

The **Browse** button activates the browse window. It performs the same function as clicking on the browse window. However, this button provides {Enter} as a keyboard shortcut. This button is also handy if you have several data forms with unanchored browse forms open at the same time. It will activate the browse form that belongs to the data form whose button you click.

The **Close** button performs the same function as clicking the X-button in the top right hand of the form, but provides a keyboard shortcut for closing the form. The Browse window may be closed if it is not wanted by clicking the X in the top right hand corner of the window. Closing the data form will also close the browse form.

3.5.1. Browse Form Actions

Most action buttons are also available on the browse form. The keyboard shortcuts for these are single letters as opposed to a control-key combination in the data window. For example, in the data window, you must press {Ctrl+N} to add a new record from the keyboard. Typing "N" merely enters "N" in a data field. However, since the browse form is read-only (it does not permit typing data into the columns), you may type just "N" to add a new record. For consistency, {Ctrl+N} will work from the browse form also.

You can use the single-key shortcuts from the data form by pressing {Enter} first. {Enter} is the keyboard shortcut for activating the browse form. So if you are finishing one QSO and want to begin another, you may press {Enter} then N instead of {Ctrl+N}.

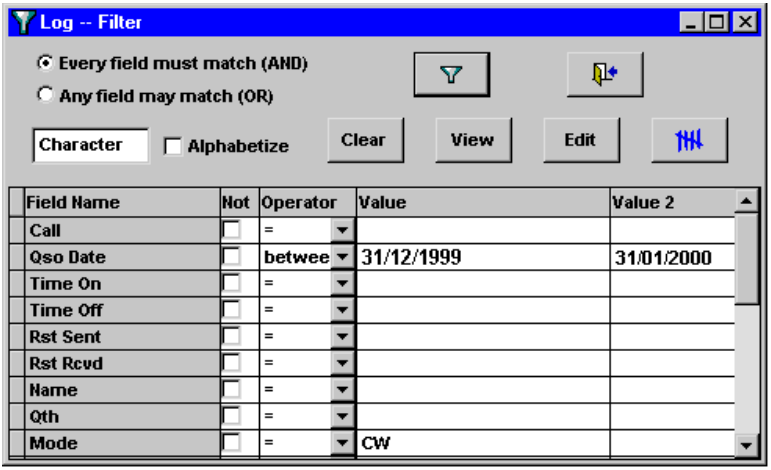
The browse window has a **Change** button, which activates the data window so you can change your data. This button performs the same function as clicking on the data form, but provides a keyboard shortcut.

The **Incremental Search** button allows you to perform a search on the currently-indexed column of the browse grid.

The **Close** button on the browse form closes the browse form *and* the data form. To close just the browse form, click the close control in the top right hand corner of the form.

The browse form has no next or previous buttons, because the grid has scroll arrows and scroll bars to accomplish the same thing.

3.6. Filtering



LOGic's data forms feature a very powerful, yet easy-to-use facility for retrieving your data. We have already discussed Getting and Searching. While these data retrieval functions will handle the majority of your lookup needs, they function only on *indexed* fields, and only on one field at a time. The Filter feature is not dependent on indexes, and can search several fields at once. For instance, you may use filtering to view all QSOs with CA on 10 meters FM with someone named Bob or Robert.

Since Filtering does not rely on indexes, it is relatively slow compared to Getting. The entire file must be read to search for matching records. Nonetheless, modest systems can search 10,000 records per second!

3.6.1. Basic Filtering

To filter, click the filter button on the data form or its browse form. The filter form will appear. It lists all fields in file(s) accessed by the form. For simple filtering, simply scroll to the desired field, and enter the search value in the Value column, then click the filter button in the filter form. For example, to find every QSO with someone named BOB, go to the Name field and type **BOB** in the Value column. If your search values are too long to fit in the field, continue to type. The field will scroll sideways.

The data form will be activated and every QSO with the value you specified will be displayed in the Browse window (you may have to scroll up and down to see them all). LOGic will also display a count of the number of matching records found.

Filtering makes the file *appear* to contain only the records that match the criteria that you specify. However, the other names are not gone. They are simply being hidden from view. The filter buttons in the data and browse forms change color to indicate a filter is in effect. To remove a filter so you can see all of your records, click **Clear** on the filter form.

3.6.2. Searching More Than One Field

To search on more than one field, fill out more than one row on the filter form. For example, to find everyone named Robert who lives in California, enter ROBERT for the value in the Name row, and CA for the value in the State row. Select **Every field must match (AND)** or **Any field may match (OR)**. If you select **Every Field**, a record will be displayed only if it matches every row that you filled in. If you select **Every field,** only people named Robert who live in CA will be displayed. If you select **Any field**, the record will be displayed if any or all of the rows that you filled in matches. In this example, it would find everyone named Robert (regardless of where they live), plus everyone in CA, regardless of what his name is. You will use **Every field** most often.

You may search for two matching values for the same field using the **Value 2** column. For instance, if you select the Name row and enter ROBERT in Value, and MARY in Value 2, everyone named Robert **or** Mary will be found.

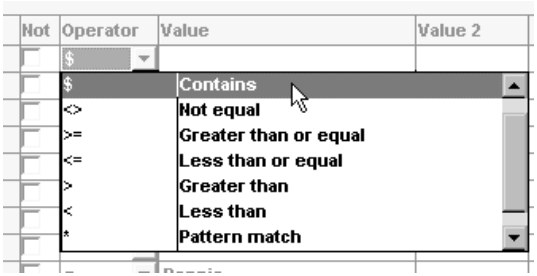
3.6.3. NOT Match

To find all records **except** those matching the search values, click the NOT column to put a check mark in the little box. Entering ROBERT for the value, and checking NOT will find everyone who is not named Robert.

3.6.4. Partial Match

With fields that contain character data, you may enter only the first part of a value in the field, and only the number of characters entered will be matched. For instance, ROB will display ROB, ROBERT, ROBBIE, ROBERTO, and ROBERTA. Entering R will find everyone whose name starts with the letter R! You may disable the partial match feature by putting an underscore (_) after the value. For instance, ROB_ will locate only ROB, not ROBERT, ROBERTO, ROBERTA, etc.

3.6.5. Other Operators



So far we have discussed searching for fields whose values equal (or NOT equal) the value we specify. By changing the Operator in the operator column, we can perform other searches. For example, field values greater than the specified value.

While **<**, **>**, **<=**, **>=,** and **Between** are especially useful for numbers and dates, they may also be used on characters. **> ANNE** will locate ANNE and all values that come alphabetically after ANNE.

The Contains ($) operator searches for the value anywhere in the field. Searching for $ AR will find ARNOLD, CAR, CARRY, etc. It is particularly useful for searching for words in long character fields such as Comments and *memo* fields—notes and addresses.

The selection of available operators will vary with the type of data the field can store. You cannot use containment or wildcard matching on numeric or date fields. Logical fields, which can contain only a Yes or No value, allow only =.

The **Empty** operator is good for locating all records where the specified field has no value entered. For instance, you can easily display all records that have no address entered. You can use NOT in combination with Empty to find all records where anything has been entered in the field.

To use the **Between** operator, you must enter something in both the Value and Value 2 columns. Between searches are inclusive. Searching for BETWEEN 10 and 20 will find 10, 20, and anything in between.

Wildcard pattern matching works similar to the wildcard filename matching in DOS and Windows. A **?** matches any single character. A ***** matches any character or group of characters, or no character. For example, **ANN? will match ANN followed by any single character, such as ANNA or ANNE. *ANN*** will match ANNA, ANNE, LOUANNE, or LOUANNA. ***?ANN?** will match LOUANNA or LOUANNE, but not ANNA OR ANNE, since the first **?** says that some character must precede ANN.

3.6.6. Counting

The filter feature is also useful if you only want a count of matching records. Counting is performed just like Filtering, except you click the count button to perform the count. Clicking Count with no search values entered will tell you how many records you have in your database.

3.6.7. Miscellaneous Filtering Notes

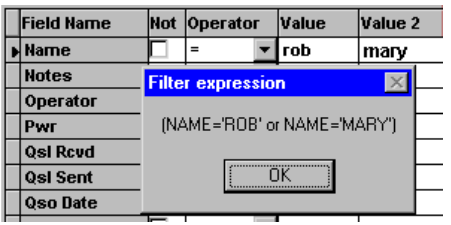
The filter form may list many fields. To quickly locate a field, click on the **Field name** column and type the field name you are looking for. An incremental search is performed, so you may type only the first character or two.

Closing the filter form does not cancel the effect of the filter on the data form. To cancel a filter when the Filter form is closed, reopen the filter form and click **Clear**. Closing a data form removes any filter that is in effect.

LOGic uses quotation marks (“), apostrophe (‘), and square brackets ([and]) internally when filtering Character and Memo fields. You may search for values containing quotation marks, apostrophe, or square brackets, so long as you do not use all three marks in the same search value. **[BIG “RIG”]** and **“JOE’S PIZZA”** is valid. **“JOE’S [BIG RIG”** will cause an error.

Case (capital vs. small) is ignored when searching.

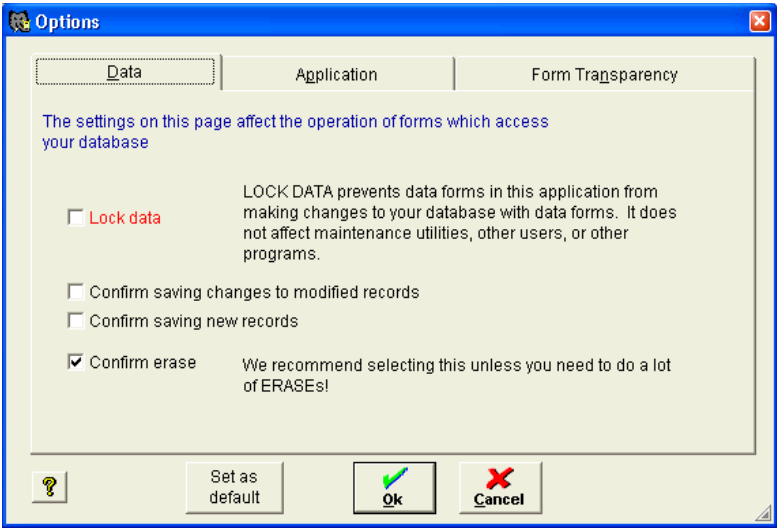
You may add or change data while a filter is in effect. However, any data that does not match the filter will disappear from the filter view. It will be available when the filter is cleared or from another instance of the same data form.



The filter form analyzes the values you enter and creates *select criteria,* also known as a **filter expression**. You may view the select criteria by clicking the **View** button. While making select criteria from scratch can be challenging, they are quite easy to read, and are often more easily understandable than looking at the grid.

While LOGic’s Filter Maker is very powerful, there are some very complex searches that it cannot do. You may enter your own select criteria so as to search on any imaginable criteria. Click the Edit button and enter the select criteria. See LOGic’s help.

3.7. Application Options

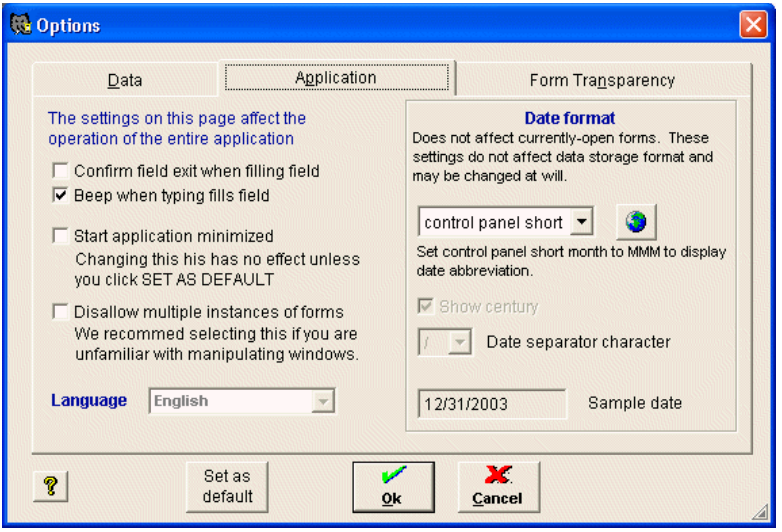


Select Options from the Tools menu on the menu bar to set options that affect the behavior of the entire application. Changes normally are in effect only until you exit the application, and will be reset to their defaults when you restart the application. However, if you click Set as Default, your changes will be saved and used every time you run the application.

•**Lock Data** will prevent you from accidentally changing data from a data form. It does not protect data from maintenance utilities, or other users or programs that may be accessing your data.

•**Confirm saving changes**. LOGic does not require that you take any action to save changes you have made to data. It saves them automatically whenever you proceed to do something to another record or exit the form. If you make changes and decide you do not want to save them, you normally Undo. However, you have the option to be prompted for confirmation whenever LOGic saves changes.

•**Confirm erase**. Normally you are asked for confirmation when you erase a record. You may wish to disable this prompt if you will be manually erasing a lot of records.



•**Confirm field exit**. When off, the cursor automatically jumps to the next field when your typing fills the current field. When this option is on, you must press {Tab}, {Down Arrow}, use the mouse, etc. to exit the field and go to the next.

•**Beep when typing fills field**. This option gives you audio alert when you have filled up a field.

•**Start application minimized**. If you select this option, LOGic will load but appear only as a button on your task bar when you run it. This is ideal if you put a shortcut to LOGic in your Startup folder. When changing this option, you must click Set as Default, or it will have no effect.

•**Disallow multiple form instances.** LOGic allows you to open some forms (such as the log form) multiple times. This is a very handy feature, but can be confusing to the novice user. If this option is selected, attempting to open an already-opened form will simply show the existing form rather than creating a new form.

•**Date format.** Normally LOGic uses the date format set in your control panel. Click the button to run the control panel date format selector. However, you may select from among numerous other options. You may select the date format used to display and enter data. You may change this option at will, as it does not affect the format used to store dates in your database.

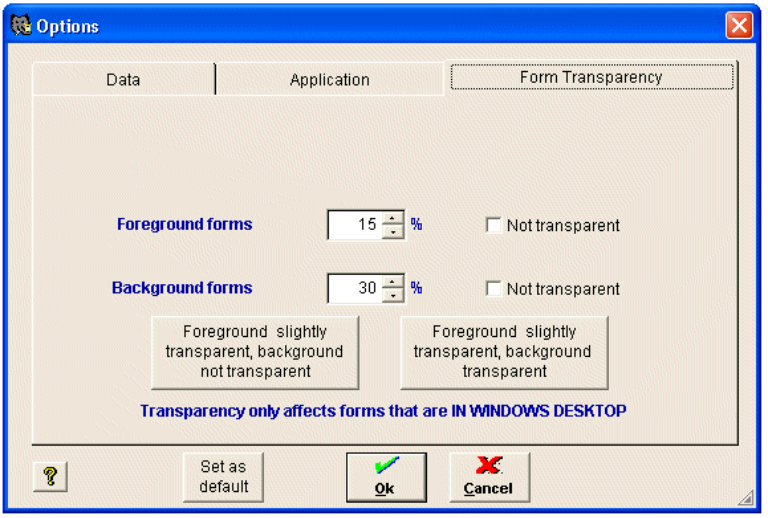
3.8. Transparent forms

LOGic features a fantastic visual effect--transparent forms! Besides looking extremely cool, it makes managing a multitude of forms easier, because you can see even windows that are completely covered by other windows! Click the help button to see a full-color example of form transparency.

Transparency works only for windows with In Windows Desktop turned on.

You can adjust the amount of transparency independently for foreground windows (the form you are currently using) and background windows. A bigger number makes the forms more transparent. 0% turns off transparency. 90% is the maximum allowable transparency--any higher and the forms would be invisible! There are buttons to turn on recommended settings, but do try different combinations.

When initially turning on transparency (changing it from 0 to something else), currently-open forms are not affected. Close them and reopen to see the effect. After transparency is turned on, simply clicking on the form will refresh the transparent display.



4. Log Form Basics

4.1. Logging a QSO

By now you are familiar with the overall operation of LOGic. Let's log a QSO.

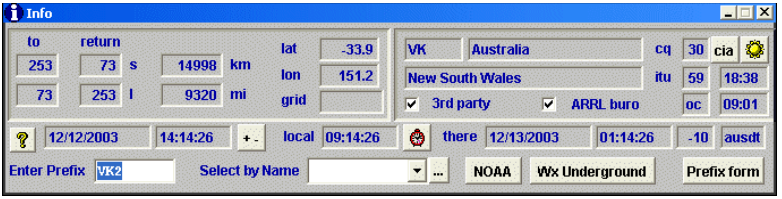
A log form opens by default, but if you were playing around and closed it, open it again. Click on Forms/Log Form. Select Main from the log forms menu. Open the info form again by clicking on the Forms menu. (It is not necessary to have the Info form open to use the log form, but we will be discussing it in this section).

Click the Add New QSO button. Type a call in the Call field, then press {Tab}. The little box to the right of the call field will be checked if the station has ever been worked before. If the station has been worked before, name, QTH and state will be copied from previous QSOs. You can choose which fields are copied from previous QSOs and the prefix table. (See the help file in LOGic.)

LOGic will analyze the callsign by searching its database of over 4,000 prefixes, and in most cases look up and log the proper DXCC country. Other information such as CQ zone, ITU zone, and continent may be logged. If your radio is interfaced to LOGic, the band, mode, and frequency will be logged.

4.1.1. Info Form

The Info form displays comprehensive information about the station's location, (often to within a region of the country), DX and direction to the station, DXCC country, CQ and ITU zones, time zone, local time at the station's QTH, any "time warps" such as Daylight Savings Time, ARRL bureau and third-party traffic status, etc.



Click the CIA button for a display of maps, demographic data, flag graphics, etc from the United States Central Intelligence Agency. The NOAA and WX Underground buttons display world-wide Weather info obtained from the Internet. Right-click to see your local WX.

See the Info form section on page 89 for more details.

4.1.2. DX and Direction

When entering a call, the info form displays approximate DX and direction based on the callsign. Note that this is an approximation. These figures will be more accurate if you log a state or grid square. Use the DX Calculator under the Tools menu for exact DX and Direction calculation.

Use the return direction to assist the other station in aiming his antenna towards you. See the appendix on return headings in LOGic's online help.

The DX and Direction calculation is of course based in part on your location. You may change your latitude and longitude in the station info form.

4.1.3. Moving from Field to Field

Navigate the log data form by clicking on the desired field with the mouse, or using {Tab} to move to the next field, or {Shift+Tab} to move backwards through fields.

4.1.4. Dropdown Menu Fields

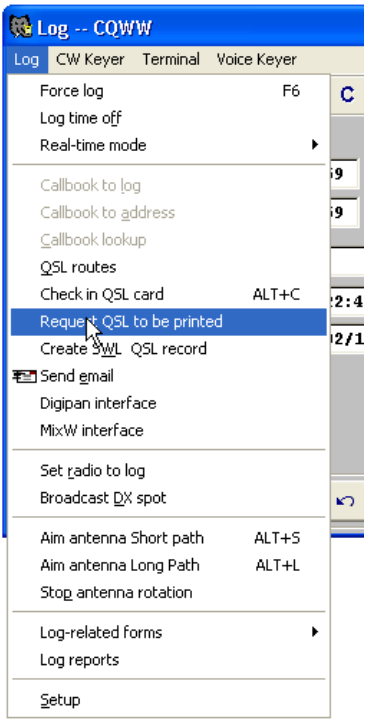
Fields that have a predefined set of choices (DXCC, state, band, mode, etc.) appear as dropdown menu fields. If you know the value to be entered, you may just type it. Press {End} to go to the last choice, {Home} to go to the first choice, or {Del} to blank the field. To see a menu of choices, press the {Space}

bar or click on the down-pointing arrow to display the menu choices. You may select from the menu with arrow keys or by typing the value, then pressing {Enter}, or by clicking with the mouse.

Most dropdown fields display descriptions for each acceptable value. You may search the values and descriptions by pressing {F2} or clicking the button to the right of the field. A search control will appear.

4.1.5. Log Menu

The Log menu (on the *menu bar*) accesses options related to the log form. You may press {F5} for quick keyboard access to this menu.



4.2. Real-time and Non-real-time Logging

By default, LOGic is set up for real-time logging. It automatically logs the date and time, and reads the band, frequency, and mode from the rig if the radio interface is enabled. To enter data from an old paper logbook, you may disable the real-time mode by selecting Real-time mode on the Log menu, and turning it off. If you want a log form to start up with real-time mode off, click Setup in the log menu, and set Real Time mode off in the General section.

4.3. Log fields

Most of the fields in the log form are self-explanatory or are adequately documented with the *touch help* or *status bar* help. However, some need additional explanation.

·***Call*** Enter any portable designators as customary, except when a station signs portable with a single number. In these cases, enter the portable designator with the proper country prefix so that the computer can process it properly. For example, log N6MRQ/4 as N6MRQ/W4. If the station is signing with a designator that does not indicate his location--MM for Maritime Mobile, AM for Aeronautical Mobile, or an interim identifier for a temporary license upgrade authorization, enter this suffix preceded by a dash (-) instead of a /. For example, WN4AZY-AM. This will prevent LOGic from treating it as a true portable designator.

·***State*** This field is for valid US states that count for WAS only. Enter MD if you work a District of Columbia station. This does not affect address printing when QSLing. Entering a state will alter the beam headings and prefix display unless a grid square is logged.

·***DXCC*** This field is used for tracking DXCC. It is normally filled in automatically based on callsign. However, there are some cases where the country cannot be properly determined from the callsign. In these cases, simply enter the country manually. Press {F2} for a list. You may type the first letter or two of the country, then press {F2}. This will cause the country menu to pop up with the selected area of the list displayed, so that you do not have to page through a long list. In instances where location can be more accurately determined from the country than the callsign (the country designator contains a hyphen), entering a country will alter the Prefix Info Box and beam headings.

·***RST Sent and Rcvd*** Enter the signal reports here. You may make these default to 59(9) by clicking Log/Setup.

·***Via*** Enter information about how a QSL card is sent. Put a manager's callsign, BURU, or whatever, here. This field interfaces to LOGic's QSL Route facility.

·***Mode*** A list of valid modes is displayed at the bottom of the screen. This list is taken from the data entered in the Modes form. You must enter a mode for LOGic's awards progress tracking to work. The mode is automatically filled in from the value entered in the last QSO, or to the mode read from a computerized radio.

·***Freq*** Enter the frequency in Megahertz. Your entry will be checked against the band table, and you will be alerted if you are operating outside a legal amateur band. If the frequency is inside a valid amateur band, the band field will be filled in automatically. You may alter the

band table to conform to your license class, add new bands, or remove bands that you do not use. You do not need to enter a frequency.

·***Band*** You must enter a band for LOGic's awards progress tracking to work. The band field is automatically filled in with the band from the last QSO logged, or, if using LOGic with a computerized radio, from the frequency on your radio.

·***Date and time*** **Date** and **Time On** are automatically filled in for you. **Time On** is first filled in when you Add a record. This keeps the new record at the bottom of the Browse window. It is updated when you type a call and press {Tab} to indicate the time contact was established. **Time Off** is filled in when you exit the Data window or add another QSO. You may manually change these fields. A **Set time off** option is available from the **Log** menu pad for easily filling the **Time Off** field with the current time. Automatic logging of date and time may be turned off. (Click the Log menu, then Real Time) This is helpful when entering data from your old paper logbooks.

·***QSL Sent*** This field keeps track of cards sent. If you want to send a QSL card for this QSO, place an **R** (Requested) in the QSL Sent field. This alerts the report writer (see page 80) to print a card or label for this QSO. F (Fulfilled) means that the card has actually been sent. The report writer will (with your permission) automatically update this field. However, if you are filling your cards out by hand for some reason, type **F** here to show that the card has been sent. **This field has no effect on awards progress tracking.** You may enter X to indicate that the other station does not want a card.

·***QSL Rcvd*** This field indicates not only whether or not you have received a QSL card for this QSO, but if you *expect* to receive a card. If you have requested a card and expect to receive it, enter An R (Requested) here. When you receive the card, recall the QSO and enter an F (Fulfilled) here. You may enter X to indicate that a card is not wanted, or an I to tell awards tracking to Ignore the QSO.

The awards progress system uses the QSL Rcvd field to track unworked/worked/confirmed status. It also indicates Requested status so that you can see that while an entity is not confirmed, you are expecting a card for it.

Note! The QSL Card printing process looks only at QSL sent. Awards tracking looks only at QSL Rcvd. Be careful not to confuse the two.

·***LoTW Sent*** A checkmark appears here if the QSO has been uploaded to the ARRL Logbook of the World. You may checkmark this manually, but normally you will let LOGic do it automatically as part of the upload process. If you wish to re-upload a QSO, manually uncheck this.

·***LoTW Rcvd*** QSL status for LoTW. Like QSL Rcvd, but for Logbook of The World QSLs. See QSL Rcvd above.

·***Pwr*** If you desire, log transmitted power in watts here. This is automatically filled in with the value you entered in the Station Info form, if any. This field will accept fractional watts for QRP operation. Only the four most significant digits will be stored.

·***Operator*** if the same log is used by several operators, as may be the case with a DXpedition or club station, enter the call of the operator making the QSO here. This field defaults to the call entered in Station Info. If you change it while logging, the new call will carry forward to subsequent QSOs.

·***Contest ID*** is filled in automatically when contesting. LOGic uses it to differentiate between contest and non-contest QSOs.

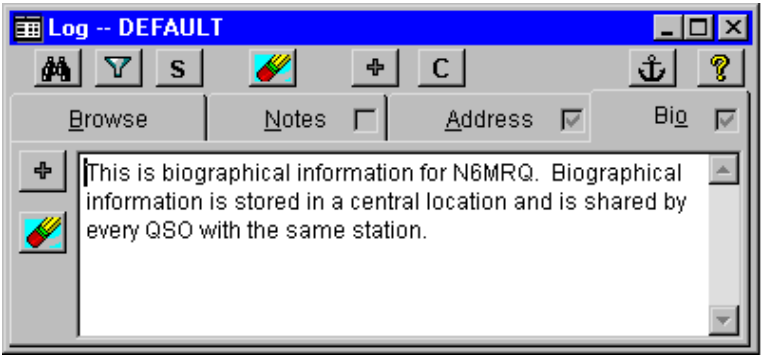
4.4. Notes, Addresses, and Biographical Information

On the log's browse form are index tabs that access Notes, Addresses, and Biographical information. This information appears in editable windows. Right-click to adjust the font size, etc. The check marks on the index tabs allow you to determine if there is anything entered without having to select the tab and actually look at the field.

LOGic can store unlimited notes with each QSO. This is good not only for long comments, but also for storing third-party traffic or the contents of a digital QSO. You may copy data from the data terminal, or any other Windows program, and paste it in Notes, Address, or Bio.

If you plan to generate mailing labels, enter the address in the Address field. Addresses may be easily copied from callbook databases (see page 81) while logging, or you may type the address yourself. Format the address as you want it to appear when printed. There is an option in the Log menu to copy the name, QTH, and state from the log data to address field.

If you want to print an address from a CD-ROM or web callbook database, you must transfer the address to the address field. The report writer cannot read the CD-ROM or internet directly. This gives you an opportunity to review the address for proper content and format.



Biographical information is like notes, except that info for all QSOs with a particular station is stored in a central location. So, if you work the station the first time, and enter some info in the bio field, it will appear when you work the same station subsequent times. You may add to or edit the bio info at any time. Controls on the bio page allow you to add or erase bio info.

Notes and addresses fields may be placed on the data form. See page 75.

4.5. Log Form Tips

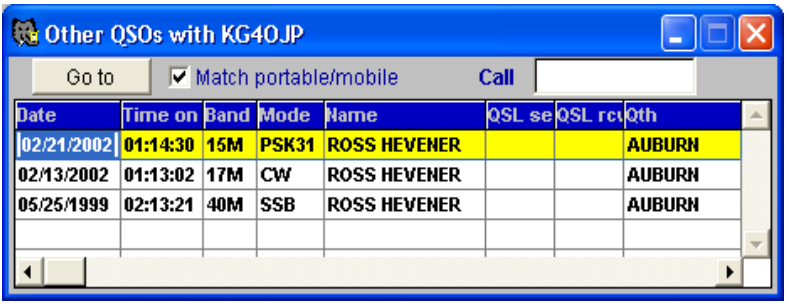
Here we will discuss miscellaneous pointers for making the best use of the Log screen.

The time, date, and information from the Prefix table are logged when you press {Tab} while in the Call field. You may log information in anticipation of working a station, even if you do not know the callsign, by pressing {↓} to exit the callsign field. Log the information that you hear. When you establish contact, place the cursor in the call field, type corrections to the callsign if necessary, and press {Tab}, or use the **force log** option of the log menu pad.

If you have already logged a QSO by pressing {Tab} while in the Call field, and wish to correct the callsign without changing the Time On field, use the {↓} key to exit the Call field after typing in the changes.

4.5.1. Previous QSOs Window

As discussed previously, when you work a station who is already in your log, a check mark appears next to the call field, and items such as name and QTH are automatically logged. To *view* the previous QSOs, use the Other QSOs form. This may be accessed by clicking the check mark, or from the Forms menu. A window similar to the Browse window will appear with previous QSOs displayed.



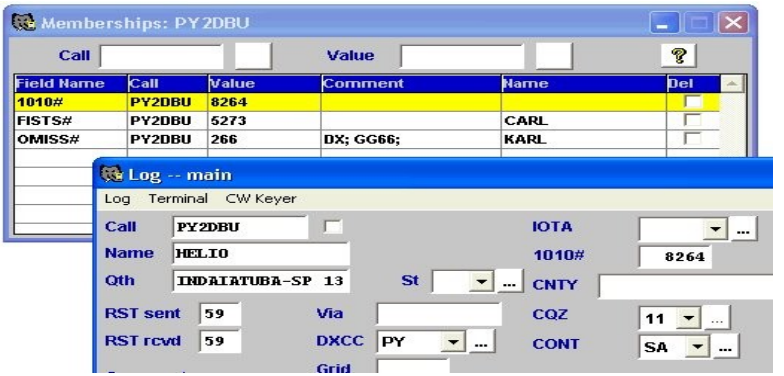
There is an option to do an exact match on the logged call, or to show portable or mobile QSOs with the same station even though the calls may be different.

To view one of the other QSOs in the log form, select it and click **Go to**, or double-click the record in Other QSOs.

The Other QSOs window automatically displays other QSOs with the station shown in the log form. You may type a call in the Other QSOs window to search for all calls with a station other than the one displayed in the log.

This form also shows previous QSOs with stations in LOGic's spot log.

4.5.2. Memberships window



The Memberships form shows any membership numbers that the station may have, such as 1010, SMIRK, FISTS, etc. See the Memberships section on page 70.

4.5.3. Multiple log forms

You can open more than one log form at a time while in LOGic. For example, you can have one log form open to log the QSO you are currently engaged in, and open a second log form to view different QSOs in your log. You could create different custom log forms for different logging activities, rag-chewing, DXing, net operations, digital communications, etc. See Designing Your Own Log Forms on page 73. If you have more than one rig interfaced to LOGic, you can associate a separate log form with each rig. Search for **Radio Interfacing** in Help for more info.

LOGic implements different contests with different log forms. See **Contesting** in the Advanced section of LOGic's help.

LOGic can automatically open up to two log forms on startup. The log form menu has options to choose which forms to open, or to turn off auto opening of log forms.

Note that opening different log forms does not create different log databases. A log form is merely a tool for accessing your data. For instance, if you enter data in the CQWW contest log form, the Main log form can also be used to view your CQWW data. It is desirable to keep your contest logs in the same database as the rest of your log so that they count for DXCC and other awards. LOGic knows how to separate the contest data when scoring, etc.

If you really want another database, search for **Multiple Databases** in LOGic's help.

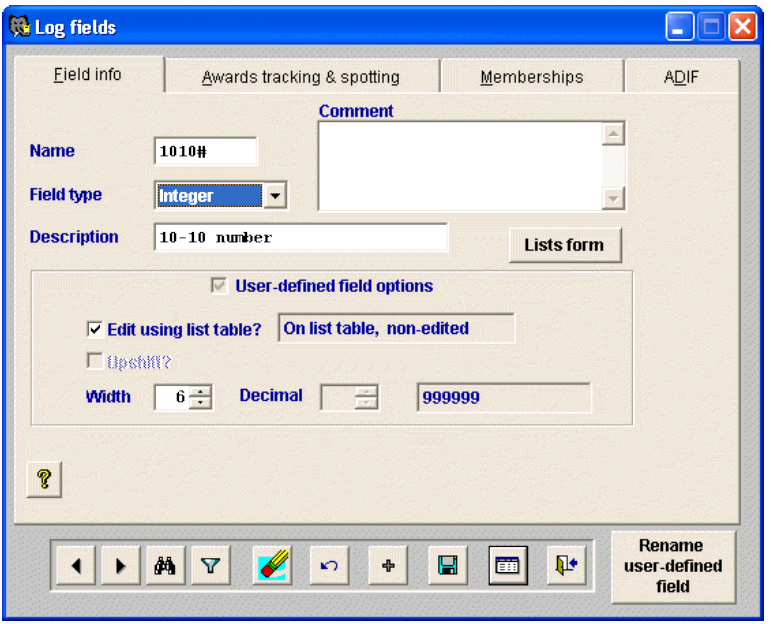
4.5.4. Email

There is an email user-defined field. If it is enabled (see page 46), you may click Email on the log menu to send email.

5. User-defined fields

One of LOGic's most powerful features is its user-defined field capability. User-defined fields allow you to log any information, such as age, occupation, rig, antenna, power, or 10-10 or other membership number, for which there are no dedicated fields. These may be searched or reported just like normal fields, and are an integral part of LOGic's awards tracking facility. You may have any number of user-defined fields.

5.1. Log Fields Table



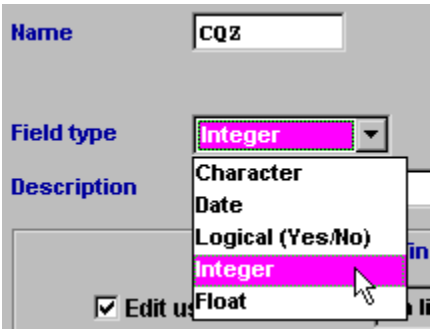
Before using a user-defined field, it must be defined in the Log Fields form. From the Tools menu, select **Setup**, then **Log fields,** then **Awards tracking & spotting**.

The Log Fields form lists all fields used by the log form, whether they are user-defined or normal fields.

LOGic comes set up with quite a few of the more popular user-defined fields. Browse the Log Fields form so as not to duplicate a field that has already been created for you.

To add a field, click the **Add New Record** button. Enter a **name** for your field.

Select a **field type**. The field type determines what kind of data can be entered into the field. **Character** accepts anything. **Logical** accepts only yes-no values, and appears as a check box on the log form. You would use a Logical field for indicating YL QSOs, for instance. **Integer** and **Float** store numeric values only. Integer stores only whole numbers with no digits after the decimal point. Float will store any number.



If you selected Character, Integer, or Float, you must specify the width of the field. If you specified Float, you must also specify the number of decimal places the field will have.

For character fields, you may choose to upshift (convert to all capital letters) the data. It is recommended that you do this for all of your character fields.

If the user-defined field will have a set of acceptable values (rig used for the QSO, for example), you may enter these values in the Lists table, and the field will appear on the log screen as a dropdown menu field. See Lists Table, page 48.

This form controls many options, such as packet cluster spotting and awards tracking. These will be discussed elsewhere and in Help.

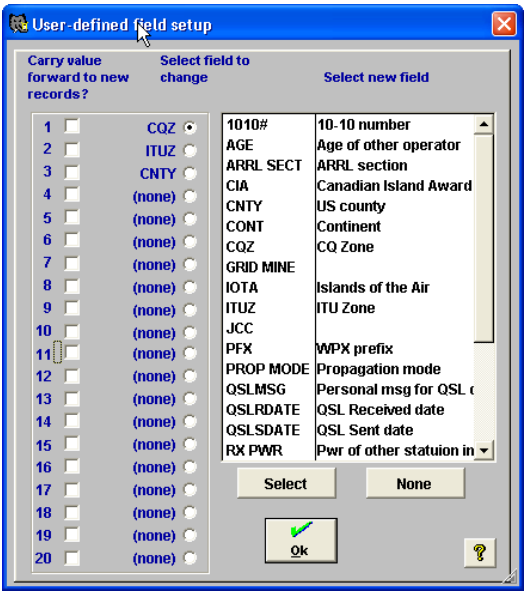
5.2. Adding User-defined Fields to the Log Form

Merely adding a field to the log fields table does not affect the log form. You must select which user-defined fields are to appear on the log form. Click the user-defined fields menu button on the log form.

You may have up to 20 user-defined fields per log form. If you need more than 20 fields, make another log form! (Only five are visible on the factory setup. See Additional Fields on page 75 to enable others).

Push the button in the middle column to select one of the twenty fields. Select which user field should be displayed in that position.

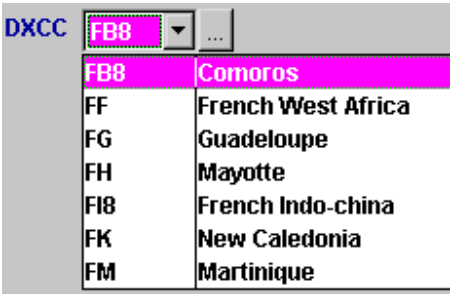
Check the Carry Value Forward if you want the last value entered to be automatically filled in when you add new QSOs. You will probably want to check this for fields related to your station and which are likely to be repeated from one QSO to the next, such as the antenna you are using, or the grid square you are mobiling from. Information related to the other station, such as the type of antenna he is using, will almost always be different from one QSO to the next, so don't check Carry Value Forward for these fields.



The browse form has columns for user-defined fields. You will probably have to pan to the right or move the user-defined field columns to the left to see them.

Although there is a limit of 20 user-defined fields per log form, they may be changed at will, and you may make additional log forms, each with 20 user-defined fields.

6. Lists Table

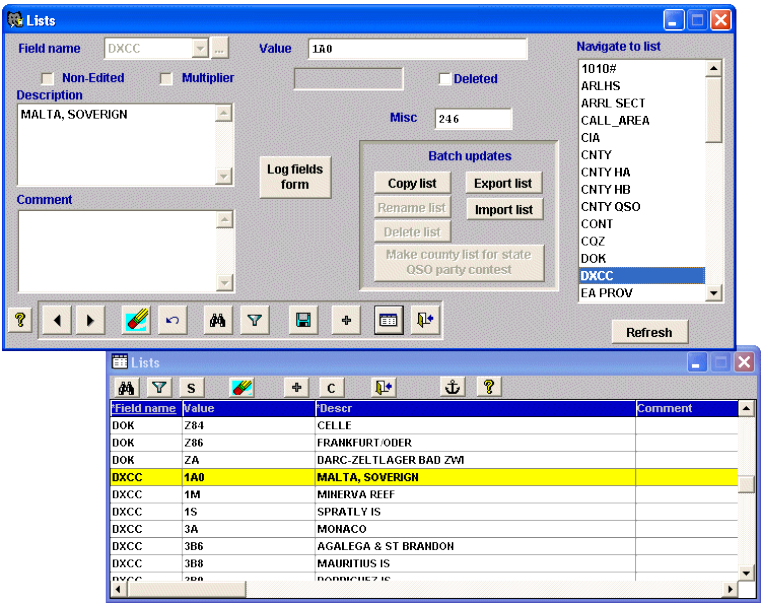


The lists table contains lists of valid values -- DXCC countries, WAS states, US counties, CQ Zones, ITU Zones, etc. These values appear in the dropdown menu fields on the log form, and are used for storing awards progress tallies.

You may add your own lists to the lists table. For example, you may make a user-defined field for the antenna used to make a QSO. If you enter a list of antennas here, they will appear in a dropdown menu field on the log form. A more common reason to add information to the lists table is to add a new award to LOGic.

You may also use the lists table to modify existing lists—for example adding a new DXCC country.

To access the lists form, select Tools/Setup/Lists of valid values from the menu bar.



For each record, enter the field name and a valid field value. Enter a description. The description will appear in the description column of dropdown menus. Check the Deleted box if the entity (usually a DXCC country) is deleted from active status. The Misc field is used for various purposes by LOGic. For DXCC entries, it contains the ARRL-assigned key number used by ADIF (Amateur Data Interchange Format) for proper import and export of DXCC countries. It contains the state in ARRL SECT entries. The FIX STUFF misc utility uses it to look up states from QSOs that have an ARRL section logged, but no state.

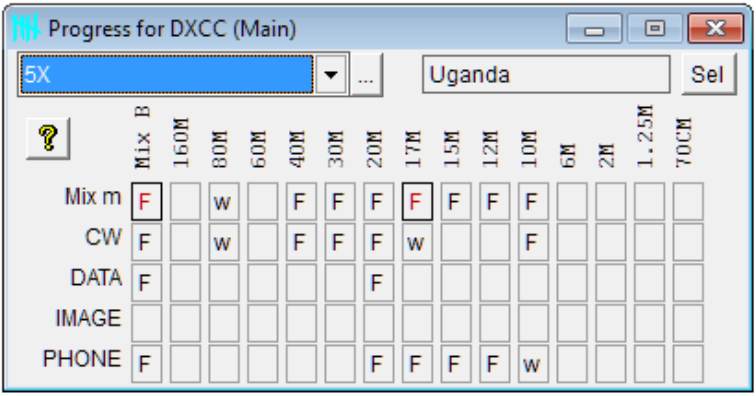
LOGic also automatically makes lists of worked entities for non-edited awards tracking and contest multipliers for which no list of valid values exist. If you have been tracking prefixes or 1010#, you will see those entities in the lists table also. The Non-edited or Multiplier boxes will be checked if LOGic entered a record automatically.

LOGic can update the US Islands and other lists from the internet. The programming that imports this data is dependent on the format of the data stored on the web sites, and will fail if the format of the web data changes.

If there are other awards lists that you would be interested in having in LOGic, have the award sponsor contact us.

7. Awards Progress Tracking

7.1. Online Progress Displays



LOGic gives you up-to-the-minute awards progress status. From the Awards menu, select Awards Progress 1. This form shows the awards progress for every band and mode combination. The top row shows the mixed mode progress for each band. The left column shows the mixed band progress for each mode. The top left hand corner field shows overall mixed/mixed progress. Status codes correspond to the QSL codes used in the log form. **F** means Fulfilled or confirmed. **R** means that a QSL has been Requested but not received. **W** means Worked, but no QSL received or requested.

The progress display is coordinated with the log form and will automatically show progress as you log. You may also look up specific entities by typing the value in the field and selecting the OK button.

When tracking DXCC, CQ Zone, ITU Zone, and Continent, you may use callsign lookup. Suppose you hear a station and want to see if you need him for CQ Zone. Rather than log him and Undo if you don't need him or can't work him, click the search button [...] or press F2. Enter the callsign and press Enter. The associated CQ zone will be displayed along with progress info.

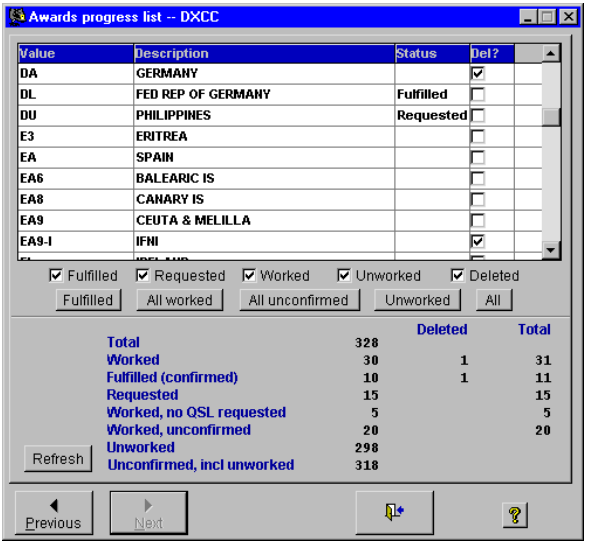
You may enter a prefix or complete callsign. However, when using callsign to look up DXCC, you must enter enough of the callsign data

so that the computer will not assume it is a DXCC prefix. If the value you enter has letters and numbers, and ends in a letter, callsign lookup is performed.

The same form tracks not only DXCC, but all other awards and sub-awards™. Click the Sel button to change the award being displayed.

There are two progress forms. You may open them both and set each to a different award.

You may see all QSOs for a particular entity, band, mode, or band-mode combination. Simply double-click the grid cell in question.



To get a summary of your progress and a list of worked, unworked, confirmed, etc. select Progress List from the Awards menu. Select an award, subaward, band, and mode, then click Next. You will be presented with totals summarizing your progress. The grid lists all entities for the award. You may view all or any combination of fulfilled, unworked, etc. by checking the appropriate boxes and buttons under the grid.

The report writer will print reports of your progress in several formats. See page 79.

7.2. Tracking Submitted Cards

LOGic keeps track of which cards have been submitted for an award. For each award, enter a unique identifier in the comment field. Put a colon after the identifier. For example, DXCCSUB: or WASSUB: When the report writer prints a progress report, it will search for a submitted QSO for each entity.

Do not make separate submitted tags for each band and mode. A card has either been submitted for an award or it hasn't. In other words, if a

20M CW card has been submitted for mixed, it doesn't have to be re-submitted for 20M or CW.

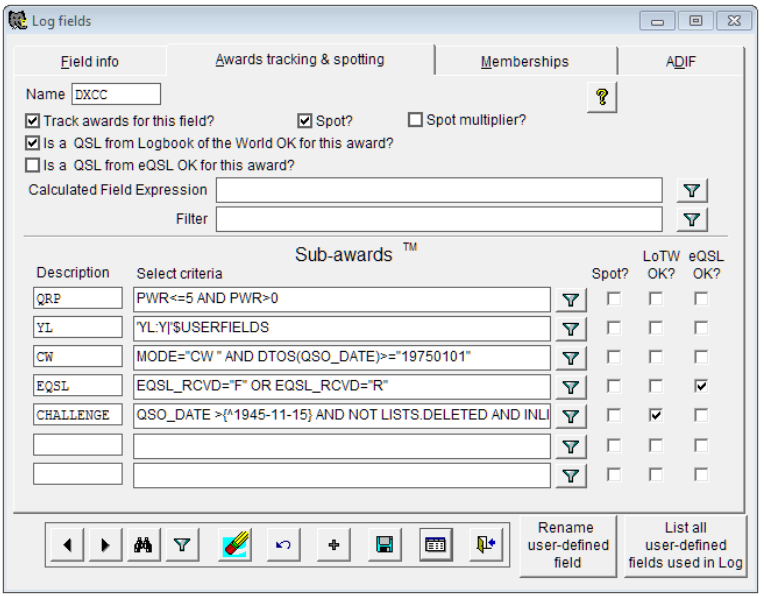
There is no special QSL Received status for submitted cards, since the same card may be submitted for multiple awards.

LOGic has user-defined fields already set up for QSL Sent Date and QSL Rcvd Date. Enable them if you wish to record this data.

7.3. Setting Up Awards Tracking

LOGic comes set up to track common awards such as DXCC, WAS, etc. However, it is capable of tracking *any* award. It can also track awards for any of LOGic's normal or user-defined fields. For instance, you could enable tracking on Call to track All-band Worked-EVERY-BODY award! To set up tracking for a new award, you will usually first create a user-defined field to contain the values to be tracked. For example, if you wanted to track Mexican States, you need to create a user-defined field in which to log Mexican states. See user-defined fields on page 45.

In order to track an award, awards tracking must be enabled for that field. Select the Awards Tracking and Spotting page of the log fields form. Place a check mark in the Track Awards box.



If a list of valid values exists in the lists table, or you intend to create one, be sure to indicate this on the Field Info page of the log fields form. Otherwise, LOGic will perform *non-edited awards tracking* on

this field—it will not display a dropdown list of valid values on the log form, and cannot report the number of unworked entities.

7.3.1. Subawards™

Subawards is a unique and powerful feature that permits tracking of specialized awards such as QRP or YL awards. LOGic will track QSOs that qualify for these specialized awards just as it does for the main award. You can check subaward progress online or with the report writer.

You may have up to seven sub awards for every main award. For each subaward, enter *select criteria* that will select the QSOs that qualify for the award. Clicking the button next to the expression will run the Filter form, and will create an expression from the values you enter.

7.3.2. Calculated Fields

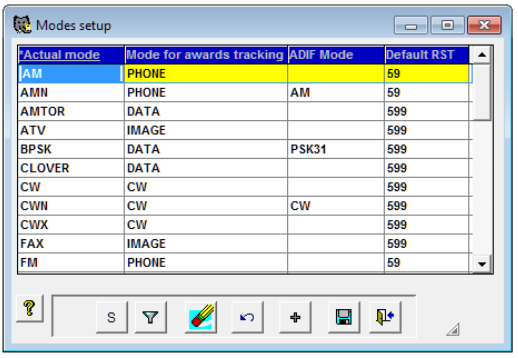
Calculated fields permit tracking of awards that are derived from data not actually entered into the log. For example, the CQ Field award is issued for working the ten-degree latitude by 20-degree longitude areas represented by the first two letters of a grid square.

Without calculated fields, you would have to create a new CQ Field user-defined field, and manually enter the first two letters of the grid square. But because of the calculated fields feature, you may simply log the Grid Square as usual, and LOGic will automatically extract the first two characters of the Grid field and track awards for it.

Calculated fields may also create a new award from a subset of an existing award. The FFMA award, in which you get credit for working continental US grid squares on 6 meters, uses calculated fields. See Help for more info.

7.3.3. Awards Modes

The modes entered into the log form are not the same ones used for awards tracking. For example, LSB and USB do not count as separate modes for awards tracking purposes. LOGic has a table that converts actual emission modes to



awards tracking modes. To edit this table, select Tools/Setup/Modes from the menu bar.

7.3.4. Update Awards Progress Info

LOGic maintains internal progress tallies automatically. However, there are cases when the progress tallies may become inaccurate:

- When you import data.
- When you change valid bands or modes setup.
- When you erase a QSO from the log, and that QSO was the only one counting towards awards progress for an entity for which it is needed.
- When you change QSL Received to a less-desirable status. For example, from Fulfilled to something else, and that QSO was the only QSO with that status for an entity for which it is needed.

This example will clarify: Suppose you accidentally log a QSO with Guam. LOGic tallies progress for that QSO. But now you erase the QSO. LOGic doesn't know whether or not to remove your progress for Guam without scanning the whole log to make sure there are no other QSOs that will count for Guam. This would take some time, and is not something you would want to wait for while operating.

Update Awards Progress also permits you to tally only selected operators in a multi-operator log, or omit WAS tallying before a specified date if you have moved since starting your log.

To re-tally awards, simply select Update Awards Progress Info from the Tools menu! This progress may find discrepancies in your data that prevent awards tallying, such as blank or invalid bands or modes, bad DXCC country codes, invalid zones or states, etc. This is especially true of imported data or counties logged from a callbook database. A summary of discrepancies will be displayed with a description of the problem, and you can click a button to edit the QSO on the log form. On the other hand, leaving these rejects won't hurt anything.

8. Logbook of The World

LOGic has great support for LoTW. Highlights include tracking of LoTW QSLs, Automatic checkin of LoTW QSLs directly from the web, automatic management of QSL Sent status for LoTW, and one-step ADIF exporting for LoTW.

8.1.1. LoTW QSLs and Awards Tracking

Before LoTW, confirmed status was easy--a QSO was either confirmed or it wasn't. Now, it depends not only on whether you have a LoTW QSL, but also on which award we are talking about. Some awards accept LoTW QSOs, and some don't.

So, the first thing to do is tell LOGic which awards accept LoTW. Go to Tools/Setup/Log Fields, Spotting, and Awards Tracking, and check the **LoTW OK for this award** check box for all awards that will accept LoTW. Be sure to check any subawards that accept LoTW. (LOGic is already set up for current LoTW-accepted awards. Add others as they become available.) For more info, see the section on Log Fields.

The Log file has a new field, LoTW Rcvd. It works just like QSL Rcvd. You could manually check in a LoTW QSL just like you would for a paper QSL. However, this is not necessary, since LOGic can automatically download your QSLs directly from the web and check them in for you. You may put Requested in LoTW Rcvd if you expect to receive a LoTW QSO for this contact. This way, your awards progress for awards that accept LoTW will show Requested QSLs just as with paper QSLs.

The existing QSL Rcvd field in the Log file refers only to paper QSLs. If a QSO has a paper QSL, it is counted as confirmed, regardless of any LoTW settings. A paper QSL is good for any award. (If someone contrived an award that accepted LoTW QSLs only, LOGic could easily handle it using the Subawards feature.)

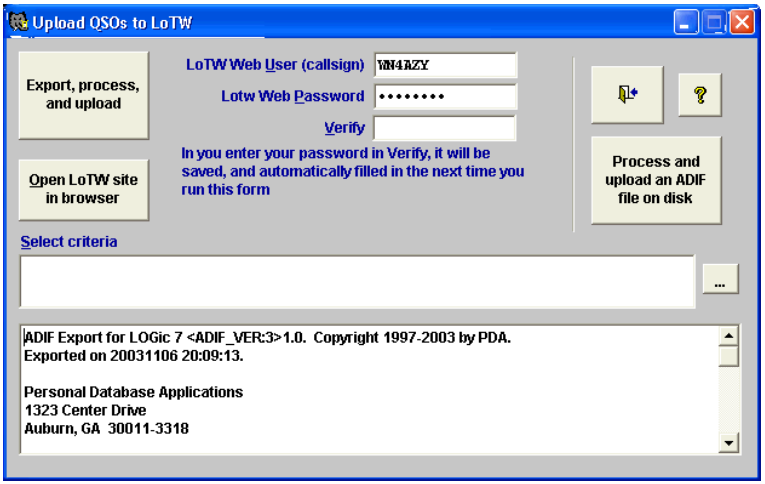
If LoTW QSLs are acceptable for an award, LOGic will use the LoTW Rcvd status for tallying awards if it is better than your QSL Rcvd status. In other words, if QSL Rcvd is blank, but LoTW Rcvd is Requested, the status for that QSO will be Received.

After changing the LoTW acceptance status, be sure to go to Tools/Update Awards Progress Info to re-tally progress based on your LoTW selection. This updates QSL status for existing QSOs. New QSOs and changes to existing QSOs will be handled automatically, so unless you import data or change LoTW Acceptance status in Log Fields, you do not have to do this again.

8.1.2. Uploading Your Log

With most logging software, uploading your log to the LoTW is a multiple-step process. You have to export the data to an ADIF file, run the ARRL TQSL software to generate yet another file, then run your web browser or emailer to upload the data to ARRL. With LOGic, uploading your log is one streamlined operation!

To use LoTW, go to the ARRL web site and obtain the necessary certificate and software. Install the software and your certificate before attempting to use LOGic to upload your log.



To upload your log, click **Export and Upload QSOs to LoTW** in the **QSLing** menu.

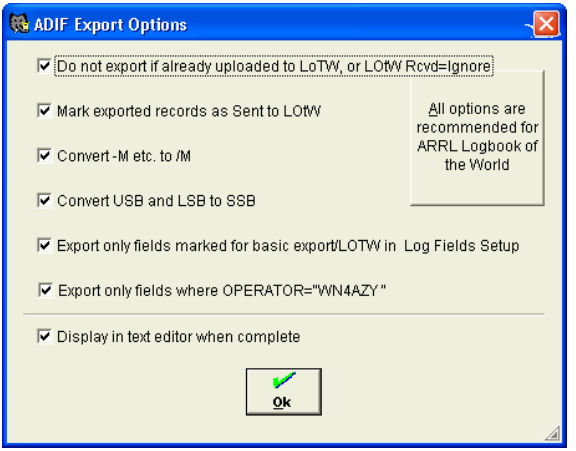
Enter your user (callsign) and password needed to log onto the LoTW web site. (Note: This is the password you selected when you set up your account at the LoTW web site, not the code on the postcard sent to you by the ARRL.) You may store your user and password so that they will be filled in automatically the next time you use this feature. To store your user and password, type your password twice--once in the **Password** field, and again in the **Verify** field. Your password will be

encrypted and stored securely to disk. Click the **Open LoTW site in browser** button to test your user and password.

You may specify a select criteria to upload only part of your log. However, LOGic automatically handles uploading only new QSOs that have not already been sent.

Click the Export, process, and upload button. A window showing some options will appear. Normally, you will not change anything on this screen for LoTW upload.

LOGic will proceed to export your data, process it into a signed file, then upload it to ARRL!



The log has a LoTW Sent field. This field is used by LOGic to automatically track which QSOs have been uploaded, so as not to resubmit them. After the export is complete, you will be asked if you want to update the **LoTW Sent** field for the exported QSOs in your log.

The **Open LoTW Web Site in Browser** button opens the LoTW web site and logs on using the user and password specified. It is not necessary to do this before importing QSLs. It is merely a convenient way to log onto LoTW, to do things such change your account settings, and for testing that your user and password is entered correctly.

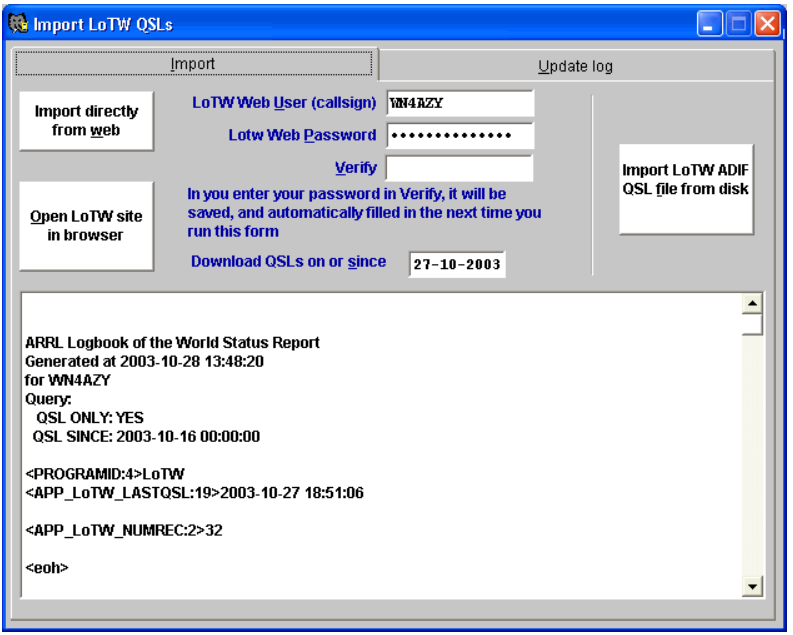
You may upload an existing ADIF file by clicking the **Upload an Existing ADIF File** in the QSLing menu. You may create an ADIF file with the **Tools/Export** menu.

If you change a QSO that has already been uploaded, and need to upload it again, simply uncheck the LoTW Sent field in the log form. The QSO will be resent the next time you upload.

8.1.3. Checking in LoTW QSLs

After you upload your QSOs, the LoTW site will hopefully already have some confirmations waiting for you. You may manually look at your confirmed QSOs on the LoTW web site, then check them in as you do a paper QSL--by changing the received status to Fulfilled. However, LOGic will automatically do this for you in one simple task.

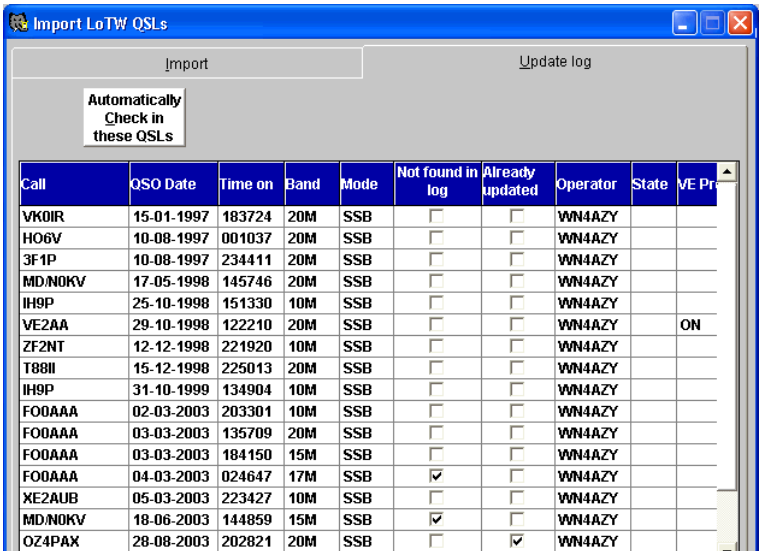
Go to the **QSLing/Import LoTW QSLs** menu. Click the **Import directly from Web** button. Enter your user and password as described above for Uploading your log. If you chose to save your user and password when uploading, it will appear here automatically.



You may also enter a date. This date will be sent to the LoTW Web Site so that only QSOs on or after this date will be downloaded. This date is extracted from imported LoTW data, and automatically entered into the date field the next time you import. To download all QSLs, blank the date field.

After a file is imported, either from disk or from the web, the QSLs are displayed in a grid. LOGic will scan all imported QSLs looking for the proper matching QSO. If no matching log record is found, the **Not Found in Log** column will be checkmarked, and the QSL will be ignored. For a QSO to match, the Call and Operator fields must match, as well as Date and Time. Note that LoTW returns the QSL with the

same date and time of the QSO that you uploaded. It does not matter that the other station may have a slightly different time. This is handled automatically by the LoTW web software. When LOGic compares times, it is OK if LOGic has seconds logged, but the LoTW QSL does not, or vice versa. In this case, only hours and minutes are compared.



Call	QSO Date	Time on	Band	Mode	Not found in log	Already updated	Operator	State	VE Pr
VK0IR	15-01-1997	183724	20M	SSB	☐	☐	WN4AZY		
HO6V	10-08-1997	001037	20M	SSB	☐	☐	WN4AZY		
3F1P	10-08-1997	234411	20M	SSB	☐	☐	WN4AZY		
MD/N0KV	17-05-1998	145746	20M	SSB	☐	☐	WN4AZY		
IH9P	25-10-1998	151330	10M	SSB	☐	☐	WN4AZY		
VE2AA	29-10-1998	122210	20M	SSB	☐	☐	WN4AZY		ON
ZF2NT	12-12-1998	221920	10M	SSB	☐	☐	WN4AZY		
T88II	15-12-1998	225013	20M	SSB	☐	☐	WN4AZY		
IH9P	31-10-1999	134904	10M	SSB	☐	☐	WN4AZY		
FO0AAA	02-03-2003	203301	10M	SSB	☐	☐	WN4AZY		
FO0AAA	03-03-2003	135709	20M	SSB	☐	☐	WN4AZY		
FO0AAA	03-03-2003	184150	15M	SSB	☐	☐	WN4AZY		
FO0AAA	04-03-2003	024647	17M	SSB	☑	☐	WN4AZY		
XE2AUB	05-03-2003	223427	10M	SSB	☐	☐	WN4AZY		
MD/N0KV	18-06-2003	144859	15M	SSB	☑	☐	WN4AZY		
OZ4PAX	28-08-2003	202821	20M	SSB	☐	☑	WN4AZY		

Only LoTW records with QSL_Rcvd=Y will be processed. You do not need to worry if you accidentally import a LoTW file with unconfirmed QSOs in it.

If a LoTW QSL is imported, and that QSO already has LoTW Rcvd set to Fulfilled, the Already Updated column will be checkmarked, and the QSL will not be processed.

Click the **Automatically check in these QSLs** button to process the imported data.

If a QSL has CQ Zone, ITU Zone, State, VE Province, County, or IOTA included, the log record will be updated with these values when checking in the QSL.

You may import a LoTW QSL file that you have already downloaded. Click on the **Import LoTW ADIF file from disk**. A file selector will appear so that you may select your file.

8.2. LoTW User file

It is desirable to know if a station you work QSLs via LoTW. If a station you work is a LoTW user, you can expect a speedy confirmation. The ARRL does not publish a list of stations using LoTW. However, HB9BZA of B & B Cyber maintains a list compiled from LoTW ADIF QSL files voluntarily submitted by their recipients. It currently has over 11,000 records. See http://rchalmas.users.ch/lotw.

8.2.1. Submitting LoTW User Data

You may easily email your received LoTW logs to B & B Cyber. Simply click the button! If you have not yet set up LOGic's email facility, a form will appear where you must enter the SMTP server, username/password, and your email address. Consult your internet service provider's documentation for this information, or copy the settings from your normal email program. You may also change the destination address should it become necessary.

If you press the Send Test Email button, a test email will be sent to the **From** address, not to BBCyber!

8.2.2. Using the LoTW User database

Simply click Tools/Internet/Import **LoTW Users Membership List.** The LoTW User database is added to LOGic's memberships facility (see page 70). Click Forms/Memberships to show the memberships form. As you use the log form or spot log, the Memberships form updates and will indicate if the station is a LoTW user.

8.3. LoTW Troubleshooting

Nearly all of the tech support requests we receive regarding LoTW problems involve problems not related to LOGic. You MUST have the proper certificate and the latest version of the ARRL LoTW software installed, and have the proper password entered into LOGic. LOGic cannot bypass the LoTW security measures! Try uploading an ADIF file manually using the TQSL software. If this does not work, LOGic will not work either.

See Help for a list of troubleshooting procedures. If LoTW suddenly quits working, the most probably cause is an expired certificate. There is an extensive article on LoTW Troubleshooting on the LOGic Forum at http://www.hosenose.com.

9. eQSL

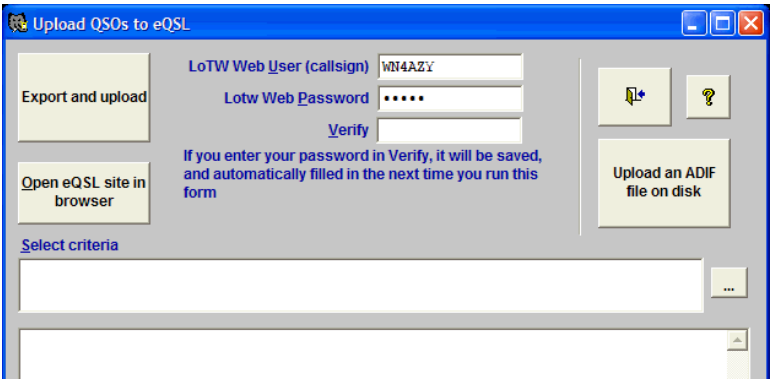
LOGic provides comprehensive automatic support for eQSL, similar to the well-known automated Logbook of the World (LoTW) facility (see p. 55) introduced in LOGic version 7. eQSL's purpose is a little different than LoTW. It provides virtual QSL cards which you can download. As a LOGic user, you may store these QSLs with the actual QSO using LOGic's picture facility (p. 66). eQSLs do not count towards DXCC and other common awards, but they may be used for similar awards -- eWAS, eWAZ, eDX, and eDX100 -- offered by eQSL. LOGic will, of course, track these awards.

Go to http://eqsl.cc to learn more about eQSL and to sign up. Basic membership is free. Setup is much easier than for LoTW. You can be using eQSL in a matter of minutes.

Using LOGic's eQSL facility is similar to its LoTW facility. Users familiar with LOGic and LoTW can skim this section. However, if you are upgrading from LOGic 7, please read about eQSL awards tracking in Help. Your imported log fields table should be checked to make sure eQSL awards tracking is turned on.

9.1.1. Uploading Your Log

With most logging software, uploading your log to the eQSL is a multiple-step process. You have to export the data to an ADIF file, then run your web browser or emailer to upload the data to eQSL. With LOGic, uploading your log is one streamlined operation!



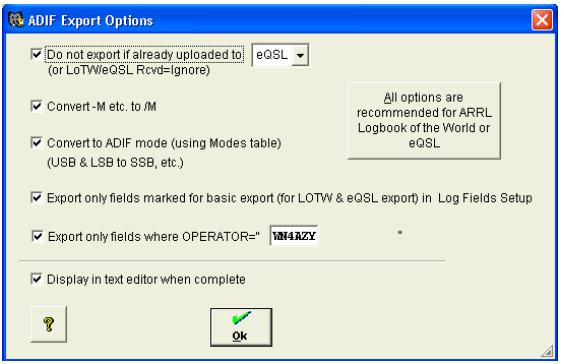
To use eQSL, go to the eQSL website and and sign up if you haven't already.

To upload your log, click **Export and Upload QSOs to eQSL** in LOGic's **QSLing** menu.

Enter your user (callsign) and password needed to log onto the eQSL web site. You may store your user and password so that they will be filled in automatically the next time you use this feature. To store your user and password, type your password twice--once in the **Password** field, and again in the **Verify** field. Your password will be encrypted and stored securely on disk. Test your user and password by clicking the **Open eQSL site in browser** button. If this function does not work, LOGic will not be able to upload your data.

You may specify select criteria to upload only part of your log. However, LOGic automatically handles uploading only new QSOs that have not already been sent.

Click the Export, process, and upload button. A window showing some options will appear. Normally, you will not change anything on this screen for eQSL upload.



LOGic will proceed to export your data, then upload it to eQSL!

The log has an eQSL Sent field. This field is used by LOGic to automatically track which QSOs have been uploaded, so as not to resubmit them. After the export is complete, you will be asked if you want to update the **eQSL Sent** field for the exported QSOs in your log.

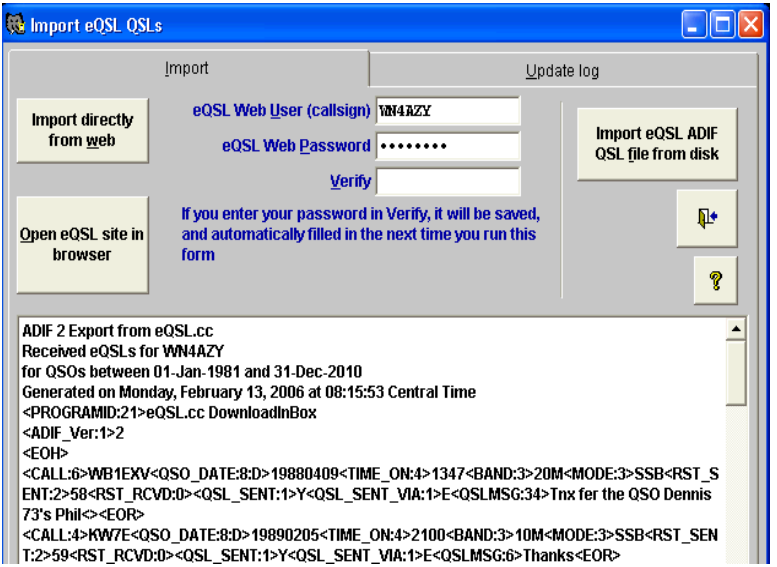
The **Open eQSL Web Site in Browser** button opens the eQSL web site and logs on using the user and password specified. It is not necessary to do this before importing QSLs. It is merely a convenient way to log onto eQSL to do things such as change your account settings or test that your user and password are entered correctly.

You may upload an existing ADIF file by clicking the **Upload an Existing ADIF File** in the QSLing menu. You may create an ADIF file with the **Tools/Export** menu.

If you change a QSO that has already been uploaded, and need to upload it again, simply uncheck the eQSL Sent field in the log form. The QSO will be resent the next time you upload.

9.1.2. Checking in eQSL QSLs

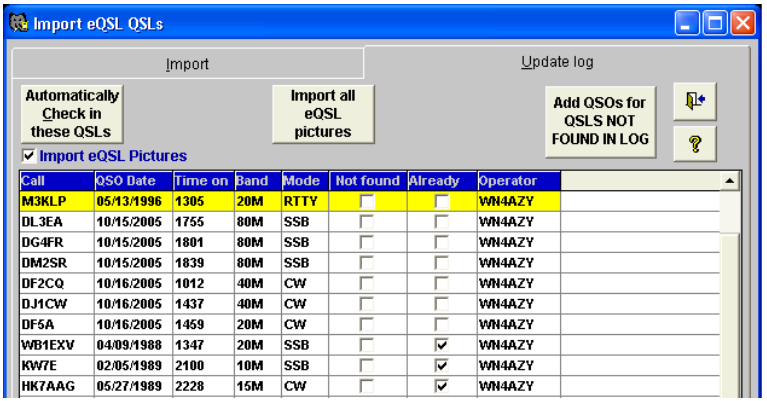
After you upload your QSOs, the eQSL site will hopefully already have some confirmations waiting for you. You could manually look at your confirmed QSOs on the eQSL web site, then check them in as you do a paper QSL--by changing the received status to Fulfilled. However, LOGic will automatically do this for you in one simple task.



Go to the **QSLing/Import eQSL QSLs** menu. Click the **Import directly from Web** button. Enter your user and password as described above for Uploading your log. If you chose to save your user and password when uploading, it will appear here automatically.

After a file is imported, either from disk or from the web, the QSLs are displayed in a grid. LOGic will scan all imported QSLs looking for the proper matching QSO. If no matching log record is found, the **Not Found in Log** column will be checkmarked, and the QSL will be ignored. For a QSO to match, the Call and Operator fields must match. It does not matter that the other station may have a slightly different time -- eQSL allows an hour difference in times.

The header of the eQSL ADIF file will be checked to make sure that the ADIF file was created by eQSL. You do not need to worry if you accidentally import an ADIF file with unconfirmed QSOs in it.



If an eQSL QSL is imported, and that QSO already has eQSL Rcvd set to Fulfilled in the log, the Already Updated column will be check-marked, and the QSL will not be processed.

Click the **Automatically check in these QSLs** button to process the imported data.

You may import a eQSL QSL file that you have already downloaded. Click on the **Import eQSL ADIF file from disk**. A file selector will appear so that you may select your file.

If your eQSL ADIF file contains QSOs that are not in the log, this will be indicated in the Not Found column of the grid. This will happen if you accidentally lose log records somehow, or you receive a confirmation from someone you did not work. LOGic has the option to Add **QSOs for QSLs not found in log**. If you have lost log records, use this option only as a last resort. The File from eQSL does not contain all QSO information. Restore from a backup if possible.

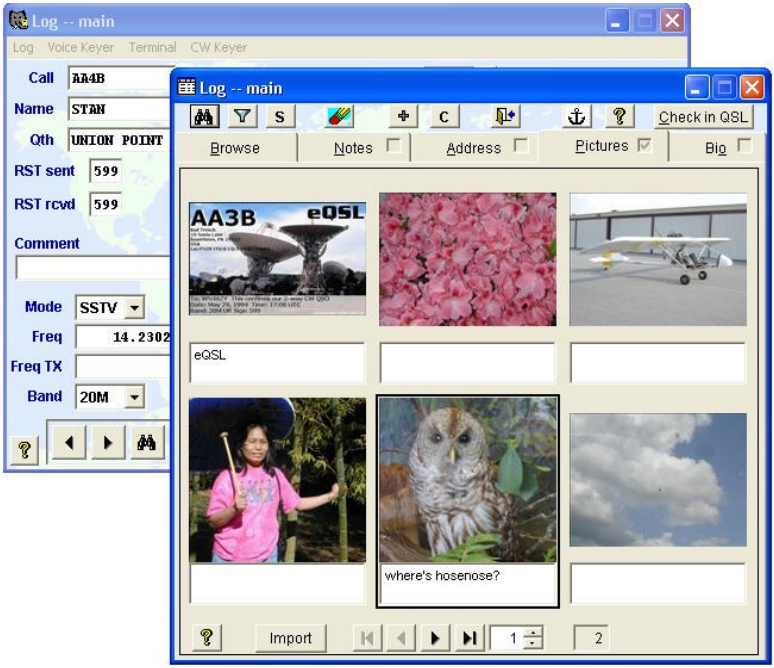
9.2. eQSL Cards

LOGic's picture logging facility (p. 66) is the perfect place to store, view, and manage your eQSL cards. Simply make sure **Import eQSL pictures** is checkmarked before clicking **Automatically check in these QSLs**. Your eQSL Card pictures will be automatically imported.
Click the **Import all eQSL pictures** button to scan all QSOs with eQSLs, and import any pictures that are missing. You don't need to worry about duplicates if the QSL picture has already been imported -- LOGic will not import it again.

If you import an eQSL picture by copy/paste or drag/drop from your web browser, then have LOGic automatically import the picture, you

will have duplicate pictures for that QSO. This doesn't hurt anything, but you can delete the duplicate to save disk space. When deleting a duplicate QSL picture, delete the one that you imported manually, not the one that LOGic imported automatically. If you delete the one LOGic imported, you will get a duplicate again if you ever import from eQSL again. LOGic puts **eQSL** in the description field of any QSL pictures it imports. You can tell for sure which is which by right-clicking the picture and selecting Info. It will show **(EQSL IMPORT).JPG** as the original filename for the QSL picture that was automatically imported.

10. Logging Pictures



You may store any number of images with each QSO. Think of the advantages of having a convenient way to organize received SSTV images, electronic QSL cards, scans of your paper QSL cards, or photos taken at eyeball QSOs!

The log form browse window has a pictures page. It is used for viewing, importing, and managing pictures. The checkmark in the Pictures tab indicates that the QSO has pictures. This is helpful for seeing whether or not a QSO has pictures when you are in one of the Browse form's other pages, such as Log or Address.

LOGic supports all popular standard raster image formats: JPG, PNG, GIF, TIF, and BMP.

10.1. Importing Pictures

There are several ways to import pictures into LOGic's database:

- **Import a picture from disk using a file selector.** Click the Import button. A standard Windows file selector dialog will appear. Select the file to import and click **Open**. Note that selecting the Thumbnail view option is usually the most convenient way to select the picture you want to import.

- **Drag and drop from Windows Explorer.** You may select single or multiple files in Windows Explorer, and drop them on the import button, the background of the Log Pictures window, or in the background of the Log Data window itself (this is useful for importing pictures when the Browse window is closed).

- **Drag and drop from Internet Explorer.** You may drag a picture displayed by Internet Explorer, and drop it on the import button, the background of the Log Pictures window, or in the background of the Log Data window itself (this is useful for importing pictures when the Browse window is closed).

- **Paste from the Windows clipboard.** You may copy a picture to the clipboard in another application, Internet Explorer, or Windows Explorer, and paste it into LOGic by right-clicking the **Import** button, the thumbnail area, or the background of the main log data form (this is useful for importing pictures when the Browse window is closed). See Using the Clipboard below.

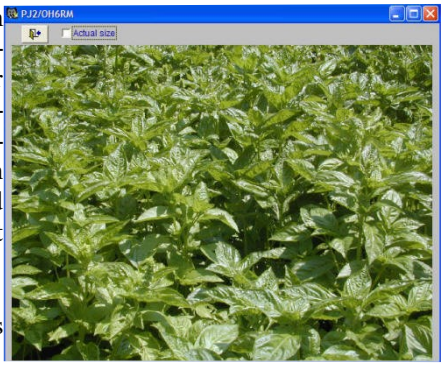
After a picture has been imported into LOGic, a small thumbnail is created for display in the browse window. In some cases, the thumbnail may be too tall to be displayed in its entirety. You may see all of the thumbnail by grabbing it with the mouse and dragging it around.

You may type a caption or description for each picture.

10.2. Working with Pictures

Once pictures are stored in LOGic, you may easily view them, or export to use in other applications. You may also delete pictures stored in LOGic, or view technical information about the picture.

10.2.1. Viewing Pictures



Double-click the thumbnail in the browser to view the image. If it is smaller than your screen, it will be shown in actual size. If the picture is bigger than can be displayed on your screen, it will be zoomed to a smaller size so it will fit on your screen.

Note that the view window is sizeable.

If the **Actual size** option is checkmarked, scroll bars will appear in the view window so you may scroll to see different parts of the picture. If the **Actual size** option is not checkmarked, the picture will zoom to fit the window size.

10.2.2. Deleting pictures

If there is a picture in LOGic that you no longer want, right-click the thumbnail, and select **Delete** from the popup menu.

10.2.3. Exporting pictures

Right-click the thumbnail to export a picture. To save the picture to disk, select **Export**, and a file selector dialog will appear. Choose the directory and file name to save the picture to.

Selecting **Copy to clipboard** puts an uncompressed bitmap of the image, as well as a reference to the picture file itself into the Windows clipboard. If you paste into a graphics program, the bitmap will be used.

If you paste into Windows Explorer, the file will be copied. The file names used internally by LOGic are rather cryptic, so you will probably want to rename the image. Do not change the file extension.
See Using the Clipboard below.

10.2.4. Info

Right-click a thumbnail, and select Info to see technical information about the picture.

10.2.5. Using the Clipboard

Image data in the Windows clipboard may be in two formats--raw bitmapped picture data, or a reference to a picture file.

When you select Edit/Copy in a graphics or SSTV program, raw bitmap data is placed on the clipboard. When you paste this into LOGic, a dialog appears that allows you to save the picture in any popular image format. A preview window allows you to observe the quality of the image that will be saved in LOGic. The size of the resulting picture is also displayed. See Picture File Formats in Help for information on choosing a format.

If you right-click a picture in Internet Explorer and select Copy, or select one or more files in Windows Explorer, right-click, and select Copy, a reference to the file is placed in the clipboard. When you paste into LOGic, the picture file is copied, so no loss of quality results when importing JPEG images. (Actually, copying a picture in Internet Explorer places both a raw bitmap data and a file reference on the clipboard, but LOGic uses the file reference to avoid decompression losses when importing JPEG images.)

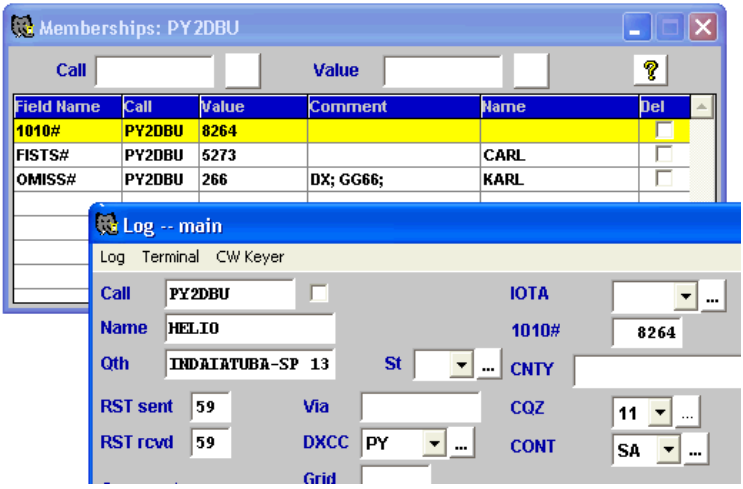
Images may be copied from LOGic to the clipboard. Right-click and select **Copy to clipboard.** This puts an uncompressed bitmap of the image, as well as a reference to the picture file itself into the Windows clipboard. This permits pasting a bitmap into a graphics program, or copying the file by pasting into Windows Explorer.

Be aware that quality losses occur when uncompressing JPEGs. So do not paste into a photo editing program then save unless you need to edit the image. If you want to merely export the picture, use one of the other methods discussed above.

10.3. Image Editing Programs

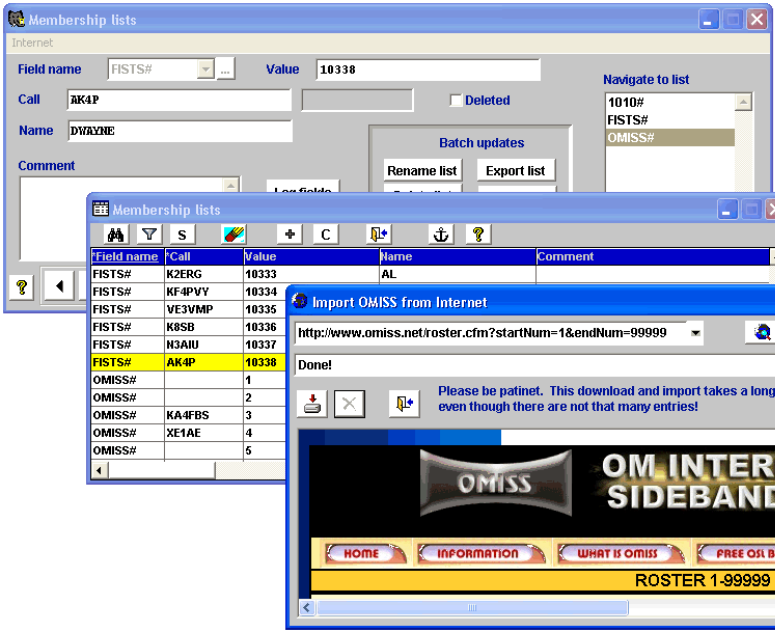
A simple image editing program is included with Windows. Click Accessories/Paint in the Windows Start Menu. A more comprehensive, free program can be downloaded from http://www.gimp.org.

11. Memberships



LOGic has always been #1 in awards tracking. Its unsurpassed awards tracking ability has been enhanced even further by the new Memberships Database feature. A new window, similar to the familiar Previous QSOs window, displays organizations to which the station you are talking to belongs. For example, if you work a station, you will know immediately if he is a 1010 Member. If you are operating on ten meters, his 1010# will be automatically logged. (If you're not on ten meters, why not ask him to QSY?) You may also do reverse lookups--if you know a 1010 number, find the callsign that owns it. To display the Memberships form, select it from the Forms menu.

Control operators and members of DX nets will love this feature.



A data entry screen is provided for easy entry and maintenance of membership lists. Access this form from **Tools/Setup/Memberships Lists**. Lists may be exported to share with other LOGic users.

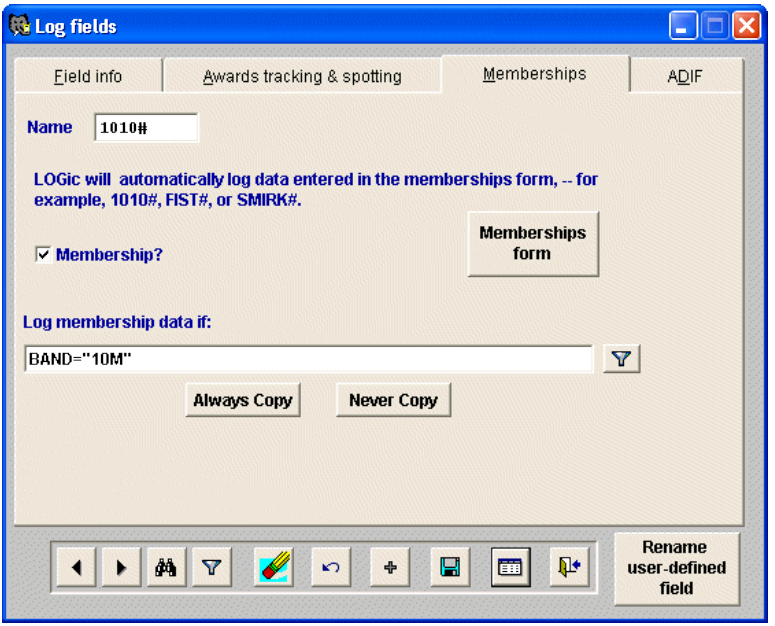
Currently 1010, FISTS, OMISS, FOC, YLISSB, the HB9BZA LoTW Users list, and other lists may be updated from the internet at the click of a button. Others will be added as they become available. If you would like to have your favorite award support internet updating, have the membership secretary contact us. We will provide software for maintaining the list and publishing it on the web.

Note that this data is provided by third parties, and we cannot guarantee its availability or LOGic's ability to import it. Many membership lists are merely displayed on a web page and is not intended to be imported into a database. If the data provider changes the format of their web site, LOGic will no longer be able to import it. However, check the LOGic Forum for an update that may fix the problem. If a membership site moves or changes format, please let us know by posting to the LOGic forum.

New fields in Tools/Setup/Log Fields support the Memberships feature. You may specify if a field has an associated membership list, and specify criteria to conditionally log membership info--very useful for 1010 for example.

Edit Using Lists Table should be turned off for fields with associated membership lists.

The Memberships list has another purpose. LOGic users have asked for an easy way to be alerted when they work a particular station--DX-peditions or special-event stations, for instance. Simply enter the info in the Memberships form. Since you don't want to log any membership number for these stations, leave Field Name and Value blank. Fields are provided for Name and Comment, so be sure to fill out at least Comment to remind you why you were interested in working this station. The information you enter will be displayed in the Memberships window when you work the station.



Auto logging and awards tracking is controlled from the Memberships page of the Log Fields form. If a field has a Membership list associated with it, be sure to checkmark the **Membership?** box. To enable awards tracking, turn on awards tracking on the **Awards tracking & spotting** page, as usual. Worked entities will be added to the Lists of Valid Values as you work them. Turn off Edit Using Lists Table for any membership field.

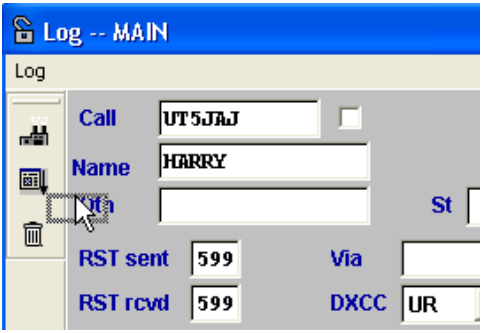
For auto logging, click the **Always Copy** button. If you auto-log only under certain conditions, enter a select criterion. The Filter button will make the expression for you. This example logs 1010# only if the band is 10 Meters.

12. Designing Your Own Log Forms

LOGic's log form offers unsurpassed flexibility. We have already discussed customizing appearance by changing color (see page 18), font, etc. However, this only scratches the surface of the power of LOGic. You can add and remove fields, position fields anywhere you desire, change the ordering of fields, and even change the log form work area.

12.1. Form Layout Toolbar

Before modifying the log form, make sure that there is at least one QSO in the log. If there are no QSOs in the log, add a dummy QSO for now, and erase it later. Click the lock/unlock button on the form. When the form is unlocked, a form layout toolbar appears. The tool bar may be docked by moving it to any edge of the log form.

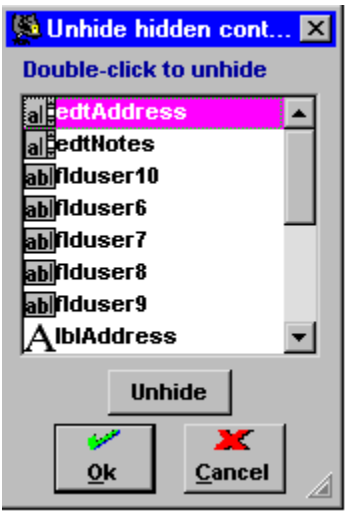


When the form is unlocked, you may move fields and labels by dragging them with the mouse. For precise placement, right-click the field, and use the arrow keys to move the field. When done, press {Enter}.

To hide a field or label, drag it into the trash can icon on the tool bar.

To unhide a field or label, click the trash can button on the toolbar. A form appears that lists all hidden items. Select an item and double-click to unhide.

The Factory button sets the layout back to factory default. There is no undo option if you do this, so make sure that you no longer want the current form layout before doing this!

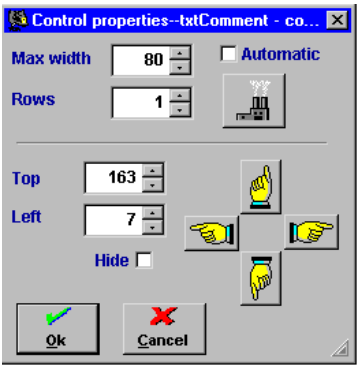


12.2. Resizing Form Work Area

When unlocking the log form, the form work area automatically expands to give you room to add more fields. If the log form is still not large enough, you may drag any edge or corner to make it even larger.

When locking the log form, it automatically shrinks to the smallest size possible to still show all of your fields.

12.3. Control Properties and Field Size



If you right-click on a field or label, the **control properties** form appears. This tool permits precise positioning of controls by specifying their position in number of pixels from the top and left edges of the log form. It may be easiest for you to drag controls to their approximate position, then precisely position them with the control properties form. Although precise placement may be done by clicking the pointy-finger buttons with the mouse, the easiest way is with the keyboard. Use the four arrow keys to move the field. Press {Enter} after you have moved the field to the desired position.

The size of character and memo fields may be changed with the control properties form. **Automatic** sets the field based on the size of the field in the database or the size specified for user-defined fields in the log fields table. If you turn automatic off, you may set the number of characters wide and rows high. If the field is set to one row high, you cannot expand it beyond the size of the field in the database or log field table.

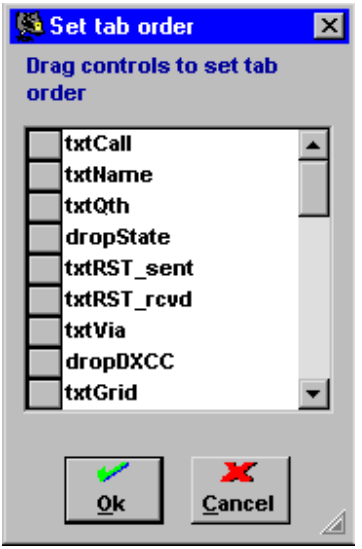
Note that changing the field size on the log form has no effect whatsoever on the database. If the field on the log form is smaller than in the database, the field will scroll sideways to accept additional typing. It will stop accepting data when the maximum database field length is reached. You may change the size of most database fields. Select Tools/Miscellaneous Utilities from the menu bar, and run **Change size of log fields**.

You may also hide controls from the control properties form.

12.4. Notes, Address, and Additional User-defined Fields

LOGic's factory setup includes several fields and labels that are hidden by default: user fields six through twenty, and fields for notes and addresses. Although notes and addresses are always available in the browse form, you may wish to place them on the log form.

There is also a field for LOGic's USERFIELDS field. This is a long character field that LOGic uses internally to store user-defined fields. This field exists for diagnostic purposes only. You should not edit USERFIELDS directly.



12.5. Tab order

After changing the form layout, you will probably want to change the tab order, which is the sequence of fields that the cursor moves through as you press {Tab}. Click the tab order button on the layout toolbar. The tab order form appears. Drag the fields using the slider buttons to the

left of the list to change the tab order. The top field will be first, the next field second, etc. The Call field should be first.

If you double-click a field in the Tab Order window, the associated field on the log form will flash. Use this feature to help you visually locate a field on the log form.

12.6. Log Form File Management

Form layouts are stored in files with a .LOGFORM extension. These files are normally kept in the LOGDATA\LOGFORMS folder inside your LOGic home folder. Clicking the Manage Log Forms button on the menus that let you select log forms will open an Explorer window in this folder. Here you may copy, delete, or rename log forms using standard Windows file management techniques.

13. Report Writer

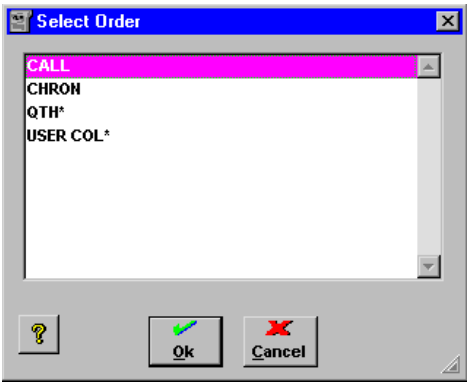
LOGic's report writer is unsurpassed for ease and flexibility in printing your log information, awards progress, QSL cards, and labels in an attractive format. All reports included with LOGic were created with LOGic's custom report writer. You may modify the factory reports or create your own. (See LOGic's help.)

There are approximately 50 different reports included with LOGic. Reports can be accessed from several places within LOGic, including File/Print to be consistent with Windows interface standards, and from the Reports menu. Reports specific to particular activities such as Awards Tracking or QSLing are also shown in their respective menus.

When selecting a menu option that prints reports, you are presented with a list of different reports. You may scroll through the list and look at the description for each report before making a selection.

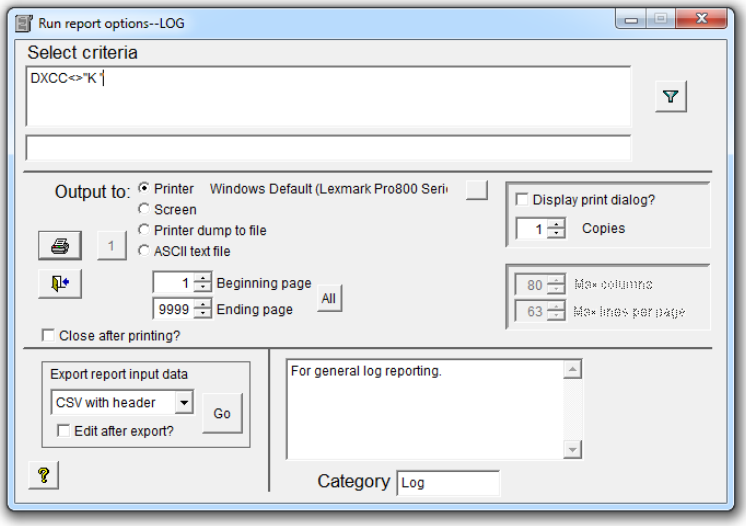
Note that reports may also be viewed on your screen. Some reports are good on-screen displays of your data.

After selecting a report, you may first be presented with forms asking you to select options related to the particular report.



Some reports allow you to select the order in which the data is printed. For example, the log report allows you to print alphabetically by callsign or in chronological order. Some options are marked with an asterisk (*). This indicates that the order requires a custom index. If you select this option, the report writer will take a few seconds to generate an index. The options not marked use indexes that are integral to the application, so there will be no delay.

Before printing begins, you will see the Report Options form. This contains a description of the report, and allows you to select several options before printing.



Various reports allow different options, so some options on this form may be disabled.

The "1" button prints a single record.

You may select number of copies if printing to a printer, and beginning and ending pages.

If you check **Display print dialog**, the Windows printer selector will appear before printing begins, allowing you to select which printer to use and change your printer's properties.

The **Output to** option lets you choose if the report should be printed, displayed to screen, or "printed" to a disk file. You have two options for disk files. Printer Dump reroutes the graphical information that is normally sent to your printer. Use this if you want to print your reports on a different printer.

Export report input data saves the database file used to generate the report to several popular formats. Note that this is not the same as printing to disk. There is no formatting or headers or footers in this export. This is simply a dump of the data that would normally be input to the report writer when printing the final report.

ASCII text output converts the graphical report to text. This text may be viewed or edited in any text editor. Since LOGic's reports are very graphically oriented, with line drawing, graphics, color, and TrueType fonts, do not expect the ASCII text file to look like the printed report! When printing to an ASCII text file, you may choose the maximum line length and the number of lines per page.

13.1. Selecting Records to Print

Frequently, you will not want to print your entire database. The report writer provides two means for selecting which records to print. The Select criteria field lets you enter an expression to limit which records are to be printed. This is most easily accomplished by using the Filter feature, which works as described in Filtering (see page 29). Press the Filter button to display the filter form.

13.2. Summary of Reports

Here is a brief overview of some of the reports included with LOGic. They are not all documented here, because we frequently add new reports and include reports created by our customers. Reports have a descriptive name, and most have additional information in the description field.

13.2.1. Miscellaneous

•Log. Prints your log data.

•Gray line. Reports all locations around the globe whose sunset or sunrise time is the same as or close to yours. This is a much more powerful aid in working gray line propagation than a graphical map display.

•Contest and Contest Summary. Prints contest logs and scores.

13.2.2. Awards progress

LOGic includes several reports for assisting your paper chasing. Each prompts for Award and Subaward™.

•All bands and modes. Prints a grid that shows the status for each band and mode for each entity.

•1010. For tracking 1010 and other awards such as county hunters, where you get credit for working increasing numbers of stations.

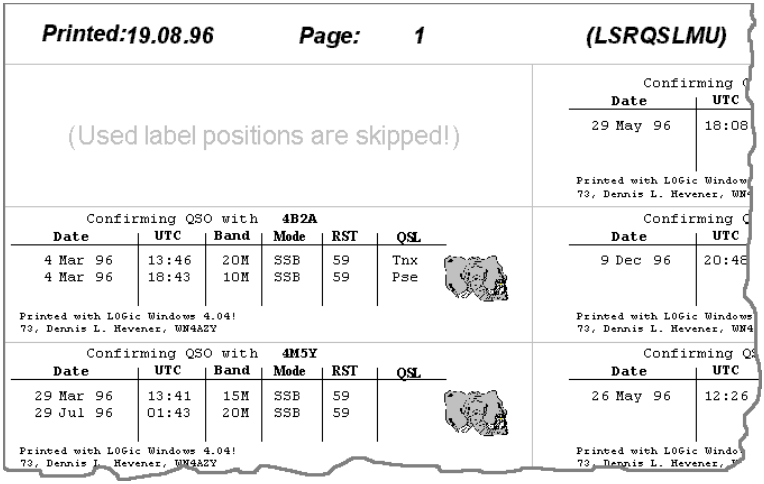
•Awards. For most awards, including DXCC, where you attempt to work all existing entities. Unlike the online progress displays or All Bands and Modes report, this selects an actual QSO that counts for the award. Use this report for pulling cards from your files for submission.

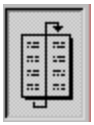
•Cards needed. This is a very valuable report that analyzes your log and reports all unconfirmed entities. It then reports all QSOs with each entity in reverse-chronological order. This makes it easy to review your outstanding QSL requests and decide which QSO(s) to try to confirm.

13.2.3. QSLing

Most of LOGic's reports are related to QSLing. There are several formats of cards, exchange labels to paste on preprinted cards, address labels, return address labels, etc. Various label sizes are supported. Some print multiple QSOs on a label. Select QSLing from the menu bar to select the desired report.

To print a QSL card or exchange label, first enter **R** (Requested) in the QSL Sent field of the log, or select **Request QSL Card to be Printed** from the Log menu. See page 40. By default, LOGic's QSL card and label reports will select these QSOs. However, you may replace the default select criteria (**QSL_SENT="R"**) with your own select criteria. For instance, **QSL_SENT="R" AND VIA="BUREAU"** will print bureau cards only.





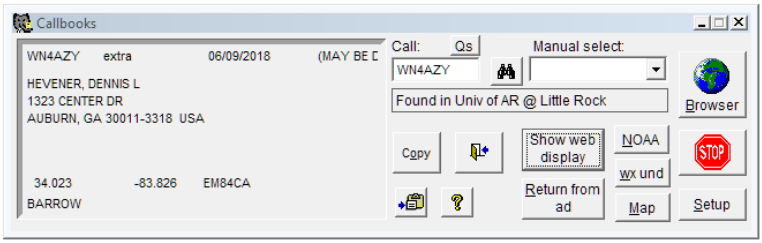
Reports that print on sheet-fed labels allow you to specify the starting position so as to not waste labels on partially-used sheets. Labels are printed starting with the top left hand label, and then down the left column, then to the top of the second column, etc.

If you have a label printer, QSL and Address labels may be printed on-demand after completing a QSO. Click Log/Print Labels. You may create custom labels reports using LOGic's report writer. Tell LOGic which on-demand reports to use by clicking Tools/Setup/On Demand QSL Printing.

14. Callbook Databases

LOGic is fully integrated with various callbook databases for automatic logging of name, QTH, address, email address, county, and grid square. LOGic includes a built-in callbook that includes USA and Canadian calls, which may be updated from the internet. It will also go directly to a number of web-based databases to find the requested call, and reformats it so that it may be imported into your log. You no longer need to buy CD-ROM databases. This feature alone will quickly pay for LOGic! However, it interfaces to various CD-ROM-based databases as well. Cosult Help for info in installing CD-ROM based callbooks.

There are videos on using LOGic's callbook feature at http://www.hosenose.com



LOGic includes a ZIP code database, which is used to find the latitude, longitude, grid square, and county for US and possessions. This is used by LOGic's internal callbook, and also when using other web or CD-ROM callbooks that do not provide this information. In other words, LOGic will always provide location and county when looking up a US station from any callbook. When logging a US station, the ZIP-based location will be used for beam headings.

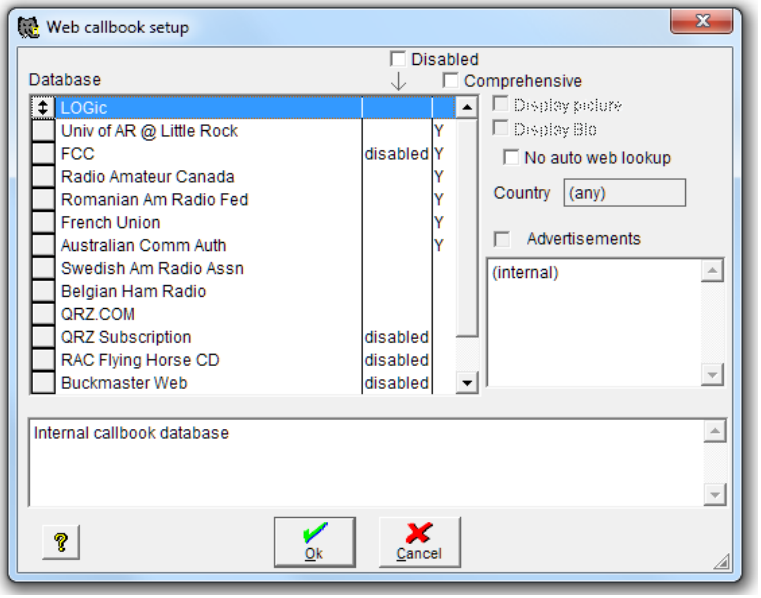
LOGic reformats the information from the various callsign databases into consistent display style and format and so that items such as name and QTH may be logged automatically.

LOGic's callbook interface is unique in that it combines several callbooks into one seamless interface. For instance, it can search LOGic's internal callbook database, and if the call is not found there, search other web and/or CD-ROM databases until hopefully the call is found. You have complete control over which databases are searched, and the order in which they are searched. The callbook setup screen is central

to making the best use of the callbook databases that you have access to.

14.1. Callbook Setup

Click the Setup button on the Web Callbook form. You will see a list of callbook databases which LOGic supports. Some are web-based, others are CD-ROM based. Also included is the LOGic entry, which references LOGic's internal database.



You can click on each entry to see information about it, such as its web address, whether or not the site is a commercial site that displays advertisements, which country the site serves (some sites serve several countries and are marked any), and some descriptive information about each source.

To disable a database, select it from the list by clicking on it with the mouse, then click Disable to put a checkmark in the Disable box. Click again to re-enable. Disable all CD-ROM databases that you do not own. You will want to disable a web-based site if the server is down or if the site is permanently taken offline, or if the format of the data changes so that LOGic can no longer read it.

LOGic searches from the top of the list to the bottom until the requested call is found. You can change the search order by dragging the entries in the list up or down.

A site may be marked as Comprehensive. A comprehensive site is considered to be complete for the country in question. If a comprehensive site is searched and the requested call is not found, LOGic stops searching--it will not search any other sites for the requested call. For instance, suppose you search for KN6LID. You have the official US Federal Communications web site database enabled. Since the FCC database is presumed to be complete and up-to-date, it is marked Comprehensive. LOGic searches it, and does not find KN6LID. Since the FCC database is comprehensive so far as US calls are concerned, we can conclude that the call does not exist in any database, so there is no need to continue to search other databases.

Note that no CD-ROM-based callbook is comprehensive. By the time the CD-ROM is made and sent to you, more people have become hams or had callsign changes. LOGic's built-in callbook will be comprehensive, but only if you update it from the internet every day. If you have internet capability, it is best to let LOGic search it's internal and CD-ROM-based databases first, then continue to search web sites if the database.

14.2. Using Callbooks

Enter a call in the callsign field, and press {Tab} or click the lookup button. LOGic will proceed to search databases in the order you specified in setup. The status field shows which database is being searched, and in which database the call is found.

You may manually select a specific database to search from the drop-down list. Use this to manually search a web database when **No auto web lookup** is selected in Setup.

14.2.1. Log Form

The log form may be configured to automatically log name, QTH, address, and grid square. Click on the Log menu (near the top of the the log data form), then Setup, then Callbook. Click the desired check boxes for the items you wish to have logged automatically from the callbook--Name & QTH, Address, and Grid Square. In order to get the most accurate weather reporting when working US stations, enable auto logging of grid square.

To make LOGic automatically copy info from the callbook, add a new QSO, type a call, and press {Tab}.

Auto logging from the callbook will not overwrite any info that is automatically logged with the Copy from Previous QSOs feature. If you want to overwrite the data copied from previous QSOs, use the **Copy from Callbook** option of the Log menu.

If you choose to have Name logged automatically, you may choose to have Last Name and/or Middle Initial logged also. Note that this feature does not work with all databases. Some databases do not separate first, last, and middle names. If this is the case, LOGic will log the full name even though you have only First Name selected for auto logging.

If you have the CNTY field enabled in the log form, and have auto logging of name and QTH turned on, LOGic will automatically log the county.

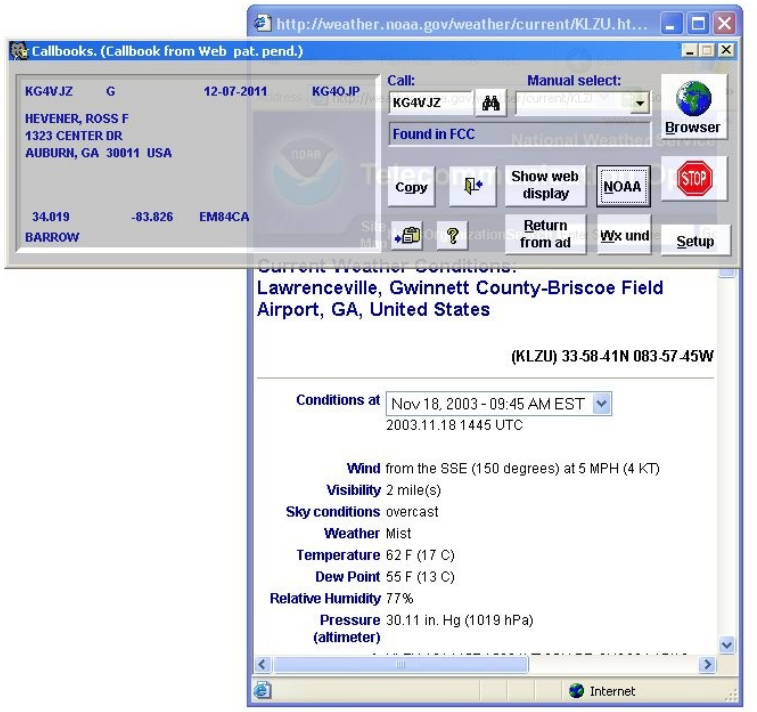
You will probably not be QSLing everyone you talk to. You may leave Address unchecked so that the address will not be logged for every QSO. If you then work someone that you plan to QSL, there is an option in the log menu that will copy the address for the currently-displayed QSO. This feature is useful for logging QSL manager's addresses. If there is a valid call in the Via field, this option will log the address of the manager. Note that this feature will overwrite any existing address.

There are also options in the Log menu to do a callbook lookup without logging anything, or to log info for the call currently displayed in the log form. Use this option if you have auto callbook logging turned off, but wish to copy name and QTH from the callbook. Note that this feature will overwrite any existing name or QTH.

The callbook form must be open in order to interface the log form to the callbook. If the callbook form is not open, it will be opened automatically. If you do not want it taking up screen space, you may minimize it.

14.2.2. Weather

There are WX buttons on the callbook form. These cause display of the weather as reported from an airport near the station being displayed by the callbook form. If you are viewing a US station, or a DX station for which the callbook database returns a latitude/longitude or grid square, the exact location of the station will be used for finding an airport. Otherwise, the callsign prefix is used.



14.2.3. Copying From the Callbook Form to the Log or QSL Routes Screen

There is a Copy button on the Callbook forms. Clicking this causes the displayed info to be copied to the last-active log form or to the QSL Routes form.

14.2.4. Callbook Batch Lookup

If you import data into LOGic, or log QSOs in LOGic without using auto callbook lookup, you can use Callbook Batch Update, found in the Tools menu.

You may also enter select criteria to limit the records that are processed--perhaps everything after a given date. A throttling and count limit feature is available to work with sites that lock you out if you do too many lookups.

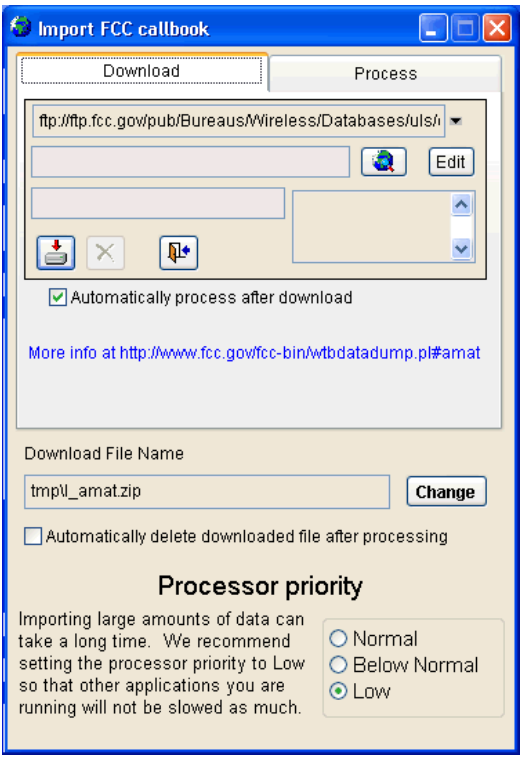
This feature will not overwrite existing data. However, it never hurts to make a backup before using this feature.

14.3. Notes on Callbooks

Here are some notes on the types of callbook databases supported by LOGic.

14.3.1. Internal callbook

LOGic's internal callbook provides practically instantaneous lookup of US and Canadian calls. It is so fast that you may even use it during contesting.



The data for the internal callbook is obtained from the FCC and Radio Amateur Canada. It is provided on LOGic's CD-ROM, but can also be downloaded from the internet. Even if you install the database from the CD-ROM, you will want to update from the internet periodically. Click **Tools/ Internet/Import FCC callbook** or **Import Canadian Callbook**. LOGic downloads the data, unzips it, and installs it automatically

Normally, you will click the button on the form that appears, and LOGic will automatically download the data, update its internal database, then delete the download. However, there are options to save the downloaded date after updating LOGic, or to process data that you have already downloaded manually.

The FCC database is about 65 megabytes. On a typical broadband connection, it will download in about 20 minutes. You may continue to use LOGic and your computer as it downloads.

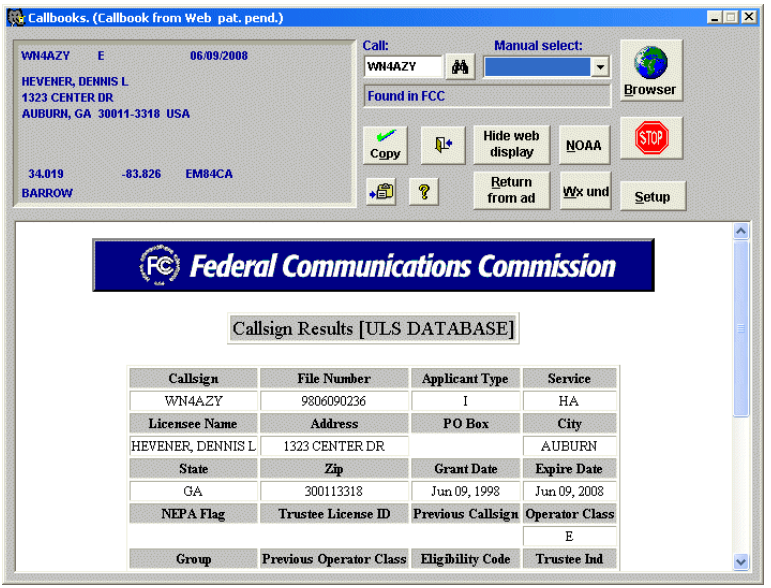
The FCC database, because of its size, takes a long time to import even after it is downloaded. The FCC import can be scheduled to run in low priority, but even so, it will slow down your computer while processing the data. Downloading FCC data into an empty database takes the longest. If the FCC data is already installed, the existing data will be updated. This is much faster than adding all records to the database for the first time.

Currently, the internal callbook has only USA and Canadian data. However, it is set up to support international data. If you learn of any web sites where callbook data can be downloaded, let us know and we will add it to LOGic's download capabilities. Also, if you have accurate and current international data that is not on the web, send us a copy and we will add it to LOGic's callbook database.

14.3.2. Web callbooks

The ultimate in callbooks is a high-speed internet connection to directly access web-based databases. Many of these are updated from government sources daily. We will add new sites as they become available. If you know of any sites that are not supported by LOGic, check our web site for updates, then if not found, tell us so that we can add them.

To use the web callbooks, connect to the internet, and proceed to do a lookup using any of the methods described above.



LOGic will analyze the data from the web page and format it so that it may be logged.

Most sites provide adequate speed for casual operation. For contesting, we recommend turning off Auto Callbook Lookup in by clicking Log/Setup in the log form. They info may be updated later by using LOGic's batch callbook feature. Click Tools/Callbook Batch Update.

The lower part of the callbook form contains a web browser display. This permits you to view the actual web page from which LOGic extracts the data. You may also click the Browser button to display the site in a normal browser window.

LOGic takes care to protect the advertising revenue of commercial sites. If the owners of these sites do not make money, they will close. Advertisements from commercial sites will be displayed in LOGic. Do not ask us to remove the advertising display. If you do not want to see the advertising displays, disable the site in Setup.

If the ad is a clickable link, you may click it and view it within LOGic. To switch to viewing a site in your browser, click the Browser button. To directly view a linked site in your browser, right-click the ad and select Open Link in New Window.

If you have auto logging from the web callbook enabled, searching a site with ads will cause LOGic's web callbook display to come to the top of other windows so that you may view the ad. Click the Return From Ad button to return to the log form.

If a site does not respond, it may be down for maintenance. Test it by using a site outside of LOGic in a browser. You can get the URL from the Callbook Setup screen.

QRZ.com offers both a free web site (be sure to log in), and a paid subscription, which features faster access, no limits on number of lookups, and no ads. If you subscribe to this service, be sure to disable QRZ.COM and enable QRZ Web Subscription by clicking the Setup button on the callbook form.

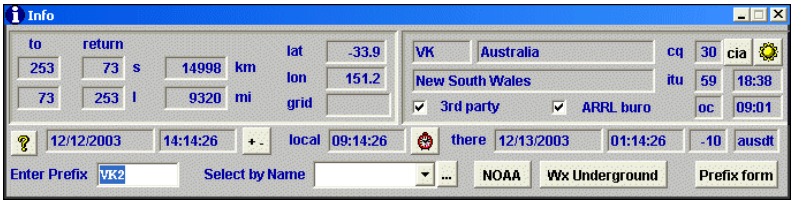
The Buckmaster web database and QRZ Subscription requires a user and password, which you will be given when you subscribe to their service. You will be prompted for the user and password the first time you try to access the site. After successful verification, the user and password will be stored for later use.

Note that web-based callbooks are provided by third parties, and we cannot guarantee future availability or compatibility with LOGic.

15. Info Form

The Info form will display comprehensive information about the station's location, (often to within a region of the country), DX and direction to the station, DXCC country, CQ and ITU zones, time zone, local time at the station's QTH, any "time warps" such as Daylight Savings Time, ARRL bureau and third-party traffic status, etc.

The Info form is interfaced to the log form. It automatically shows information about the station displayed or being entered in the Log form. It is also interfaced to the Spot Log form and DX calculator. You may manually select a location by entering a callsign prefix, or selecting a location from the dropdown list.



15.1. DX and Direction

When entering a call, the info form displays approximate DX and direction based on the callsign. Note that this is an approximation. These figures will be more accurate if you log a state or grid square. Use the DX Calculator under the Tools menu for exact DX and Direction calculation.

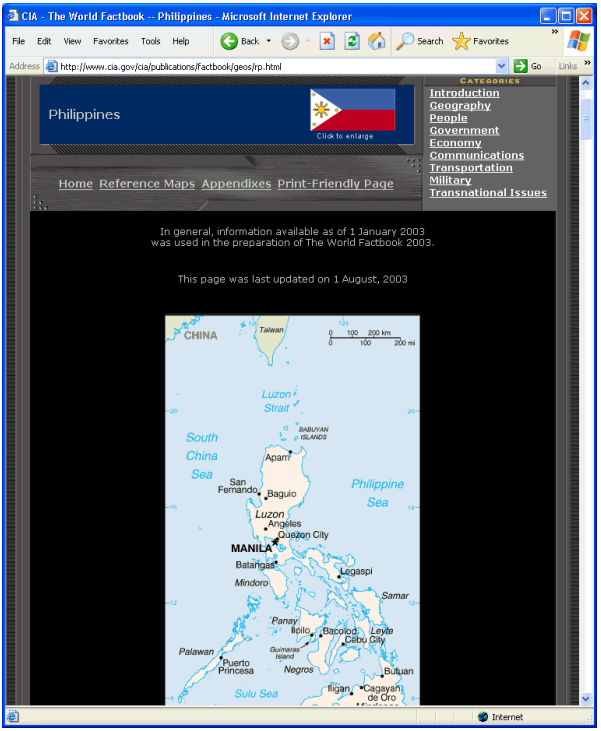
Use the return direction to assist the other station in aiming his antenna towards you. See the appendix on return headings in LOGic's help.

The DX and Direction calculation is of course based in part on your location. You may change your latitude and longitude in the station info form.

15.2. Maps, flags, political, and demographic info

The CIA button displays a map and flag, as well as demographic and political info, using information provided by the United States Central

Intelligence Agency web site. This is an impressive feature for anyone visiting your shack, and an educational opportunity for you.



You may install the CAI Factbook on your hard disk for faster lookup or use while offline. Right-click the CIA button for CIA configuration options. Follow the on-screen instructions.

Take some time to look around at the different features within the CIA window. There are numerous flag graphics in two sizes, perfect for use on your QSL cards printed by LOGic's professional reporting facility. To export the graphics, right-click them and select **Save As**. Save to the Images folder inside the LOGic folder.

Besides individual country maps, check out the reference maps.

The maps in PDF format provide the best resolution.

15.3. Weather lookup

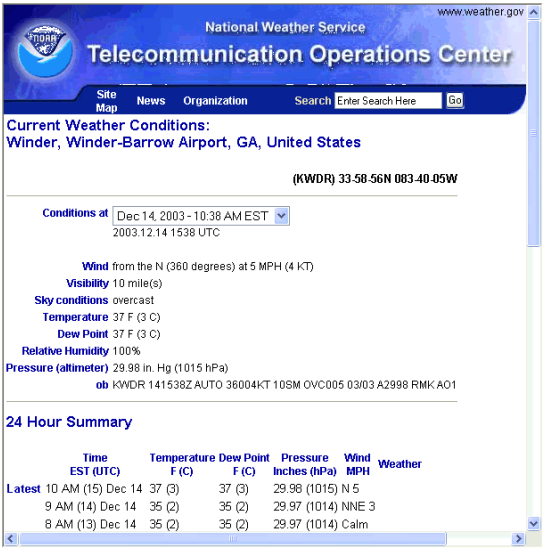
The info form provides worldwide weather reports and forecasts via the internet. This data is provided by airports across the world to NOAA (National Oceanic and Atmospheric Administration). It is available in two formats from two sources. The NOAA site is fast and concise. Weather Underground provides forecasts, and links to personal weather stations, many of which are owned by hams. Weather Underground is a commercial site, complete with advertisements and popups.

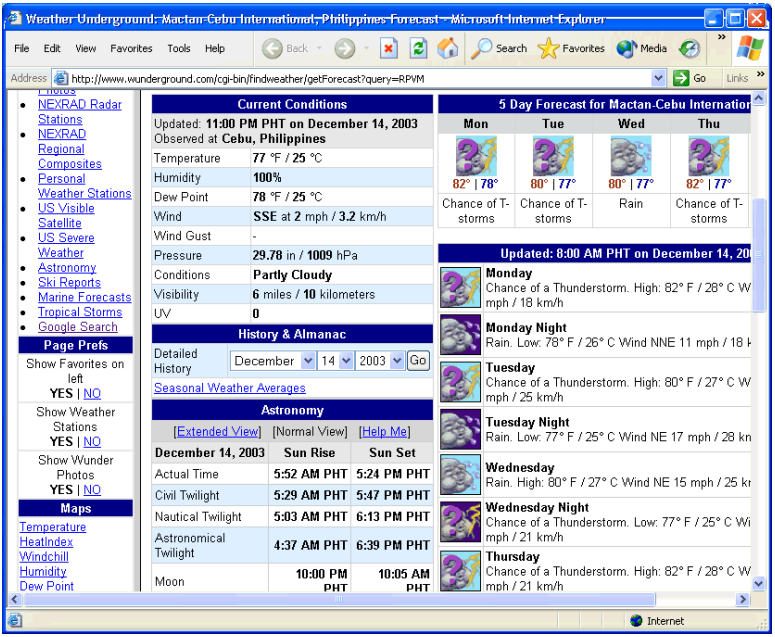
If you are using LOGic's weather facility, turn on auto logging of grid square from the callbook facility. This will provide a weather report taken within a few miles from the station you are working in most cases.

There are also WX lookup buttons on the Callbook form.

Airplane pilots, note that the weather provided by NOAA through facility is not an official outlet, and therefore the data must not be used for aviation.

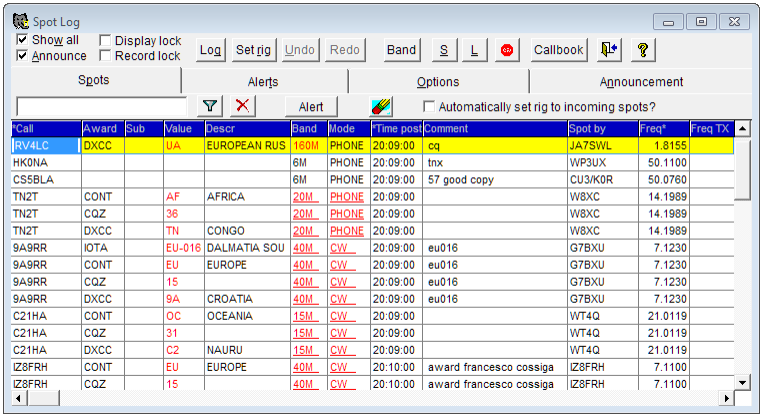
Right-click the buttons to see your local weather. See the Station Info section to select the airport to get local weather from.





16. Spotting

LOGic features a comprehensive spotting facility that spots not only DX, but also zones, continent, grid squares, IOTAs, and even U.S. States. Spots may be received and processed from a number of sources simultaneously – Telnet, Web Clusters, and TNCs. This chapter is to get you up and running with spotting quickly. There are many advanced options discussed in help, so be sure to read that too.



*Call	Award	Sub	Value	Descr	Band	Mode	*Time post	Comment	Spot by	Freq*	Freq TX
RV4LC	DXCC		UA	EUROPEAN RUS	160M	PHONE	20:09:00	cq	JA7SWL	1.8155	
HK0NA					6M	PHONE	20:09:00	tnx	WP3UX	50.1100	
CS5BLA					6M	PHONE	20:09:00	57 good copy	CU3/K0R	50.0760	
TN2T	CONT		AF	AFRICA	20M	PHONE	20:09:00		W8XC	14.1989	
TN2T	CQZ		36		20M	PHONE	20:09:00		W8XC	14.1989	
TN2T	DXCC		TN	CONGO	20M	PHONE	20:09:00		W8XC	14.1989	
9A9RR	IOTA		EU-016	DALMATIA SOU	40M	CW	20:09:00	eu016	G7BXU	7.1230	
9A9RR	CONT		EU	EUROPE	40M	CW	20:09:00	eu016	G7BXU	7.1230	
9A9RR	CQZ		15		40M	CW	20:09:00	eu016	G7BXU	7.1230	
9A9RR	DXCC		9A	CROATIA	40M	CW	20:09:00	eu016	G7BXU	7.1230	
C21HA	CONT		OC	OCEANIA	15M	CW	20:09:00		WT4Q	21.0119	
C21HA	CQZ		31		15M	CW	20:09:00		WT4Q	21.0119	
C21HA	DXCC		C2	NAURU	15M	CW	20:09:00		WT4Q	21.0119	
IZ8FRH	CONT		EU	EUROPE	40M	CW	20:10:00	award francesco cossiga	IZ8FRH	7.1100	
IZ8FRH	CQZ		15		40M	CW	20:10:00	award francesco cossiga	IZ8FRH	7.1100	

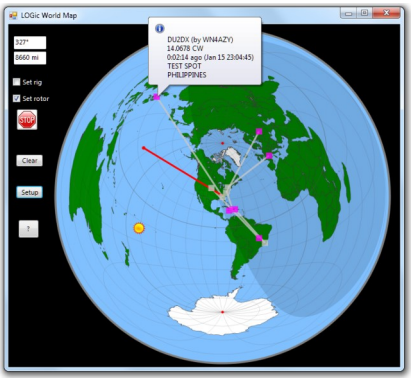
The fastest way to start using the spot log is to click Forms/DXScape or Forms/DX Summit. To use a local Telnet cluster, click Forms/Telnet 1 or Telnet 2. Consult Help for more details. Spots will be downloaded from the web site, processed to find band, mode, country, grid, IOTA, and checked to see if they are needed for any award that you are tracking.

Prefiltering of spots ignores spots that are not of interest to you. By default, only spots originating from your continent will be processed. You may change the Prefiltering by clicking the Options tab and clicking No Prefilter. Prefiltering may also be done by band and mode. Consult Help for details.

Normally, only needed spots are displayed. However, checkmarking **Show All** will show all spots in the log – only spots that have passed the Prefiltering stage.

Voice and CW announcement through your sound card is supported. Click the **Announcements** tab.

Spots are plotted on LOGic's world map. Click Forms/World Map if the map is not visible.

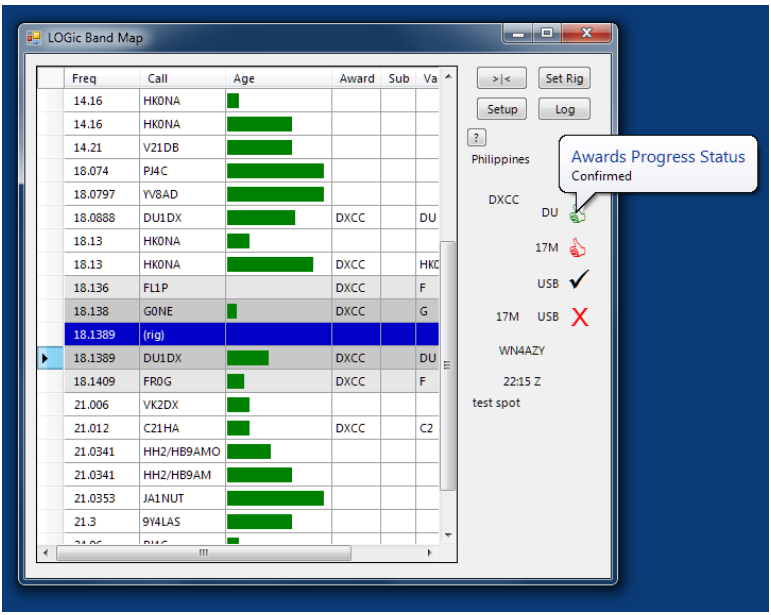


16.1. Band Map

LOGic's map displays spots in order by frequency to give you a visual overview of activity across the spectrum. You can get automatic "hands-off" information on the stations you are hearing by merely tuning your rig. To open the band map, click the Band button on the Spot Log form.

Each spot that passes the filtering of the spot log is displayed. If it is needed for anything, the award and subaward it is needed for is shown.

The blue bar represents your rig and its current frequency. The frequency display changes and the bar moves as you tune your rig. Any spots within 1 kHz of the rig's frequency are hilighted with a dark gray background. Any spots within 3 kHz are hilighted with a light gray background.



The arrowhead in the lefthand column indicates the current spot -- the spot for which information is currently displayed. You may change

the current spot by tuning the rig, clicking on the spot, or using the arrow keys.

The band map is fully integrated with your radio and the log form. Consult Help for interfacing your radio to LOGic. If you see a spot that you are not currently tuned to, but want to try to work, you may double-click the spot, or select the spot with the mouse and arrow keys, and click Set Rig. Clicking the Log button logs the spot as a new QSO. The >|< button centers the rig in the display window. Use this if you scroll away and want to return to the current operating frequency. Slightly QSYing the VFO will do the same thing.

As you tune across the band, your screen automatically updates to show information relative to the spot being tuned to.

If the spot is needed for an award, you can instantly see your QSLing status for the entity mixed-band-mixed mode, band, mode, and band-mode. Hold your mouse over the status icons for an explanation. For this example, the green thumbs-up means that the Philippines is confirmed. On 17 meters, the red thumbs-up we have worked it and are expecting to receive a QSL (we put Requested in QSL Received for the 17M DU contact). The checkmark means that we have worked the Philippines on phone. The red X means that we have not worked the Philippines on 17M CW. (We've worked it on CW and on phone, but not 17M phone. Our 17M QSO with the Philippines was on some other mode).

As you navigate the band map, LOGic Info window, Other QSOs window, and Progress 1 or Progress 2 are updated automatically.

Here are some important notes about the band map:

Spots are automatically deleted after a period of time. Ten minutes is the default, but you may change this by clicking the Setup button. The green indicator bars indicate how old the spot is. No green indicator, or a very short green indicator means that the spot is new. As the spot ages, the green bar increases in size. When it reaches clear across the Age column, the spot will be deleted.

Only one spot per station per band and mode is displayed (there may be multiple records per spot if it is needed for more than one award, however). If a new spot is received for a station that is already in the band map, the new information replaces the old. The age bar will be reset.

The age bar may not start at the beginning of the Age columns. This is because the time the spot was posted is used when possible, and it may take several minutes to make it thru the network and get to us.

17. Advanced Features

This manual covers only a portion of LOGic's many features. By reading this, you have learned basic things like how to use LOGic's powerful and unique forms for entering and viewing your data, logging QSOs, tracking awards, and printing your log data in reports or QSL cards or labels. You have also learned about more advanced features such as designing your own log form, adding user-defined fields, and adding new awards to be tracked by LOGic.

However, LOGic has many other sophisticated features not covered in this manual. Much of this information changes frequently, and is provided in LOGic's help. If you prefer a printed version of this documentation, you can print any or all topics or sections yourself.

Here are some of the advanced features covered in LOGic's Help:

- Digital communications
- Computerized CW transmission
    - Computerized voice transmission
- Control your rig with LOGic, and automatically log Frequency, Band, and Mode, and tune from Spot Log, World Map, or Band Map.
- PTT control
- Computerized antenna rotor control
- Maps
- Gray-line propagation
- Contesting
- Partial "busted call" call lookup
- Multiuser operations over a local-area network
- Design your own reports

- Export your log data in several popular formats for use in other programs
- Interface to third-party programs
- Control LOGic with other programs
- Make mass changes to your log
- Write your own data manipulation utilities for use within LOGic
- Write your own functions for use in the report writer or in contest scoring or awards tracking

18. Glossary

Application window. A main window that contains most other forms that are opened within the application. For example, a Windows word processor has an application window that contains all open documents within child windows which are inside the application window. LOGic's application window contains the log form and most other forms that can be opened within LOGic.

When the application window is moved, all of its child windows are moved as well. Minimizing the application window effectively removes all of its child windows from the desktop. Closing the application window closes all child windows and exits the application.

It is possible to move most of LOGic's windows outside the application window and into the Windows desktop. This is advantageous if you system has multiple monitors.

Double-click. Rapidly press and release the left mouse button twice in succession. Left-handed users may choose to reverse the functionality of the right and left buttons. In this case, you will use your index finger on the right button instead.

Drag. To drag something with the mouse, position the pointer on top of it, press the left mouse button, move the object, then release the button to "drop" the object. Left-handed users may choose to reverse the functionality of the right and left buttons. In this case, you will use your index finger on the right button drag operations when the documentation says to drag.

Expression. Symbols and data that define a result. For example, 1+1 is an expression that defines 2.

Logical expression. Expressions with a true or false (Yes or No) result. **1 greater than 0** is true. **1 equal 0** is false. Expressions are used extensively by all computer programs. Obvious examples are math done by the computer. But they are also used for other purposes, such as executing the proper part of a program when you make a menu choice or alphabetizing a list of file names. LOGic's filter form creates logical expressions for you.

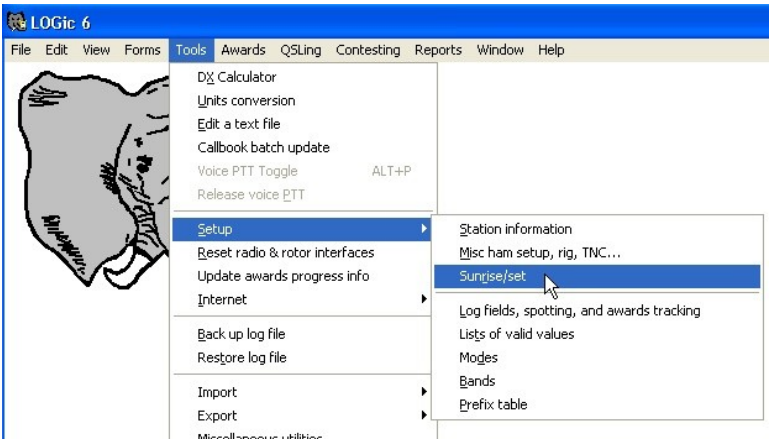
Logbook of the World (LoTW). A system of electronic QSLing sponsored by the American Radio Relay League.

Fixed font. See Proportional vs. fixed fonts.

Index a feature of database files that permits practically instantaneous retrieval of data. It works much like an old library card catalog. Addi-

tionally, an index permits instant reordering of data. A file may have more than one index.

Memo field A field in a database that can contain practically an unlimited amount of text data. LOGic uses memo fields to store notes, addresses, and biographical info.



Menu bar. The bar that extends across the top of a window and provides access to the application's or window's features. When you click an option on the menu bar, a list of options appears. Some of these options may show yet other menus, as shown here. Help information may be displayed on the *status bar*.

Minimize. Reducing a window to a small icon. Click the leftmost of the three controls that appear at the top right hand corner of a window. A minimized window will look like this:

To *normalize*, or unminimize a minimized window, click the leftmost of the three controls that appear on the right of the icon, or double-click the middle of the icon's title bar.

Non-edited awards tracking. Refers to awards tracking of awards for which no list of valid values has been entered in the awards table. A typical non-edited award is WPX (prefixes). There are simply too many possible values to make a comprehensive list. The disadvantages of non-edited tracking are that your input is not checked against a list of valid values, and LOGic cannot report the number of unworked entities. However, this is not a problem for awards such as WPX.

Even if it were possible to make a list when adding a new award, you may wish to set it up as non-edited to avoid the work of making a list. LOGic will create its own list in the lists table, and you may later convert it to a regular list.

Non-proportional font. A fixed font. See *Proportional vs. fixed fonts* below.

Proportional vs. fixed fonts. Proportional and fixed (also called non-proportional) refer to the amount of space used by individual characters in a font. In a fised font, such as Courier New, each character uses the same amount of space. In a proportional font, characters use differing amounts of space depending on the appearance of the character. For example, an upper-case **M** will be wider than a lower-case **i**. Examples of proportional fonts are Ariel and Times New Roman. The following table illustrates. Each example shows six **M**'s and **i**'s:

Courier New	MMMMMM iiiiii
Arial	MMMMMM iiiii
Times New Roman	MMMMMM iiiii

Note how the **M**s and **i**s are the same size in Courier New, which is a fixed font. With the proportional fonts, the **M**s are several times wider than the **i**s.

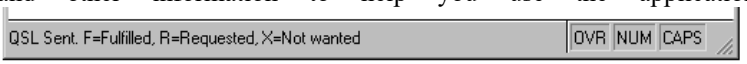
Proportional fonts are the most common. They are easier to read and take up less paper or screen space. However, they are not practical for entering data into a fixed-width field, as it is not easy to tell how close you are to filling up the field. If you are typing a lot of narrow characters, the input area on your screen will show space even though the maximum number of characters allowed by the database has been exceeded. Likewise, if you are typing a lot of wide characters, the input area will be filled before the maximum number of characters has been entered. LOGic uses proportional fonts for data labels, text edit windows, and dropdown menu selections, and fixed fonts for text input fields.

Normalize. To put a window in its normal state—not minimized or maximized.

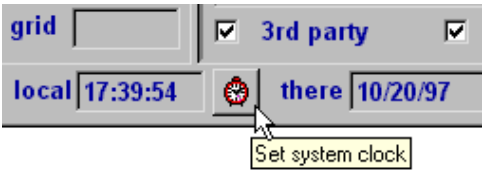
Right-click. Postion the mouse over an object, then quickly press and release the **right** button. As per Windows 95 standards, this usually brings up a menu of options, but can be programmed to perform any action the developer desires. Left-handed users may choose to reverse the functionality of the right and left buttons. In this case, you will use your index finger on the right button for most mouse operations, and click with the left mouse button when the documentation says to right-click.

Select criteria. *Logical expressions* used by LOGic's Filter feature, report writer, etc. to select a subset of your records to display or act upon. An example would be NAME="BOB ", which would select only records having BOB in the Name field.

Status bar. The bar at the bottom of most Windows applications that displays the current state of the caps lock, insert, and num lock keys, and other information to help you use the application.



Touch help. Short help messages that are available for fields, buttons, and other controls. To see the touch help, position the mouse pointer on top of the object and take your hand off the mouse or hold it still for a few seconds.



UTC. Abbreviation for Coordinated Universal Time, formerly known as Greenwich Mean Time or GMT. UTC is used in amateur radio because it is the same everywhere in the world.

UTC offset. A setting used by LOGic to convert your system's clock, which is set to your local time, to *UTC*. LOGic adds the UTC Offset to your system clock to determine UTC. A negative UTC subtracts from the system clock to obtain UTC.

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