

1. INTRODUCTION.

1.1 Welcome

The European Railway Database 2012 (ERD2012) is an easy to use database system written with the aid of Microsoft Access 2010 and is designed to manage details of the vehicles of the European railway network.

Currently the following countries are included in the full version of ERD2012:

- **United Kingdom.**
- **Belgium.**
- **Netherlands.**
- **Luxembourg.**
- **France.**
- **Germany.**
- **Switzerland.**
- **Austria.**
- **Czech Republic.**
- **Slovak Republic**
- **Poland.**

1.2 Product Features.

ERD2012 provides the following facilities for the UK and European railway enthusiast.

- The ability to record sightings and haulage together with comprehensive statistics on journeys made.
- Extensive reporting facilities to provide hardcopy print outs of vehicle details etc.
- Extensive statistical reporting giving details of the vehicles which you have seen or been hauled by.
- Recording details of your own digital photographs and relating them to individual records in the database.
- Maintaining vehicle listings including numbers, depot allocations, operators, livery and pool code details and the ability to update the records.
- The facility to update the data stored using annual update discs which can be purchased each year.

2. SYSTEM REQUIREMENTS.

To install and run ERD2012 you will need a computer system having the following minimum requirements.

- Pentium III processor with a clock speed of 233 MHz.
- Microsoft Windows XP or Windows 2000 Service Pack 3.
- 128 MB of RAM.
- 400 MB of available hard disk space.
- CD-Rom drive (or compatible DVD-ROM drive)
- A super VGA monitor with at least 800 x 600 resolution and 256 colours.
- A Microsoft mouse or compatible pointing device.

In order to use ERD 2012 you must be running one of the following operating systems.

X86 platform.

- Windows 7 or later.
- Windows Vista with Service Pack 1 (SP1).
- Windows XP with Service Pack 3 (SP3)
- Windows Server 2003 with Service Pack 2 (SP2)

X64 Platform.

- Windows 7 or later.
- Windows Vista with Service Pack 1 (SP1).
- Windows Server 2008.

If you need to install any of the Service Packs then these can be downloaded from the Microsoft web site.

3. GETTING STARTED.

3.1 Installing the software.

To install ERD2012 on your system please do the following:

- Insert the ERD2012 Installation Disc into your CD drive.
- The Installation Program should start automatically if not do the following:
 - Open Windows Explorer.
 - Navigate to the CD and locate the file "setup.exe."
 - Double click this file to run Setup.
- The Windows Installer Program will start.
- When the Welcome window appears click **Next**.
- Accept the Licence agreement, or otherwise, and click **Next**.
- Type in your details and click **Next**.
- Click on **Typical** (Please do not choose **Custom**.)
- Click **Install**.
- Wait while ERD2012 installs. Depending on your system this may take several minutes so please be patient and do not try to stop the installation.
- A window, headed Microsoft Access 2010 Runtime may appear informing you of progress unless Access Runtime is already installed on your system.
- The Microsoft Access 2010 Runtime may also appear with the Microsoft Licence Agreement unless you have already accepted the Microsoft terms. Click the Accept tick box and press **Continue**.
- Access Runtime 2010 installs and again please wait.
- On completion of the installation a window may appear advising you that the installation has completed successfully.
- ERD2012 has now been installed on your machine. You should see an ERD2012 icon on your desktop and the program will appear in All Programs on the Start button.
- You are now ready to run ERD2012 for the first time and then to register the software to obtain your password.

3.2 Starting the Program.

- To run the program click the **Start** button then point to All Programs. An option to start **ERD2012** will have been added to your start menu and this is how you will run the program. Click on **ERD2012** now and the program will start. Alternatively you may start **ERD2012** by double clicking the Screen Icon. A Microsoft Access Security Notice may appear and if it does click **Open**.
- The first window you see will ask you for the serial reference of your CD. This is a unique reference for you and can be found on the CD. Read the displayed information, then enter the serial reference exactly and press **Continue**. The serial reference consists of four letters such as "ABCD".
- The next window will enable you to confirm that you have entered the serial reference correctly. Check that it is correct and then press **Confirm**. If it is incorrect press **Back** to go to the previous window and re input your serial reference.
- The Password Entry Window opens which gives you some important information:
 - Your serial reference.
 - The Activation Key
 - The Installation Date.
 - Times Opened.
- This information is used to calculate your unique password and to obtain your password you will have to register the software.
- You should now complete the registration form and send it back to us. We will supply you with a password promptly and in most cases in seven days.
- As an alternative you may email the information requested on the Registration form and a password will be returned promptly by email.
- The second and additional passwords may be obtained by sending, either by post or by email, the information requested on the registration form and paying the appropriate fee which is currently £10.
- It is most important that you tell us your correct Activation Key. It can be found on this window and also on the **About** screen. It consists of two groups of four letters with a dash between such as "WEMA-TILG". The

Activation Key is used to calculate your unique password and if you give us the incorrect key then your password will not work.

- While you are waiting for your password you can continue to open the software for a total of 10 times as indicated by Times Opened. Your password should have returned before you reach this limit if you register promptly.
- If you have not yet received your password press **Continue** to start the database and click **OK** on the message box which tells you how many more times you can open ERD2012 without entering a password.
- When you have received your password enter it at the "Password Entry" window which appears the next time you start ERD2012. When you have entered a correct password you will go straight to the **About** Screen from where you would normally run the programme bypassing the security system.
- When the **About My ERD** screen appears click on the ERD Menu tab of the Ribbon Bar to show the ERD menu options.
- To Exit the program simply press the **Close Window** button as you would do for any Windows program or alternatively choose **Exit** from the Home tab of the ERD Menu Ribbon.

3.3

Un installing the Software.

In the event that you need to remove the software from your computer you should perform the following steps:

- Start "Control Panel" from the **start** button.
- Double Click on the **Add or Remove Programs** icon.
- Find and Highlight "European Railway Database 2012"
- Click **Remove**.
- On the pop-up window click **Yes**.
- Close the open windows when the removal process has finished and the software will have been removed.
- Remove any photographs and backup files manually using windows explorer.

4. TUTORIAL.

You have followed the instructions to install the software and have sent off your registration form and are waiting for your password to arrive. Now is the time to learn about ERD2012 and the best way to do that is by using it.

The following tutorial takes you through the various functions of ERD2012 in a way which is directly applicable to your hobby whether you are interested in train spotting, haulage, photography or are interested in the vehicles of Europe's railways and their distribution.

Throughout the tutorial you will be asked to type in various pieces of data into ERD2012. The data will be enclosed in square brackets like [this] and you should type in exactly what is between the square brackets but not the brackets themselves.

4.1 Backing up your data.

Before we start the tutorial, which will change the data in the database, we will first make a backup copy of the data so that we can restore it to its original state when the tutorial is over.

The procedure will also enable you to make backup copies of your data so that if you have a hard disc failure at some time in the future you will not loose your data, provided, that is, you have copied it to a removable media source beforehand!

Start up the program if it is not already running by clicking on the **start** button and then **ERD2012**, which has been inserted on your start menu by the setup program. You may see a window asking if you want to open the program. Just press **Open** to continue.

The first thing you will see, after the password entry screen if you have not entered your password yet, is the **About My ERD** tab.

Below the top title bar are three ribbon tabs, File, Add-Ins and ERD Menu. The one you will make most use of is ERD menu and you will have to select it every time you start ERD2012 so press the tab now.

The ERD menu appears which gives all of the options for controlling ERD. It is split up into the following five sections.

- **Home**
- **Data**
- **Recording**
- **Stock Summaries**
- **File.**

You access the various screens and procedures by simply clicking them on the ribbon bar. Try this now by clicking the **Stock** option of the **Data** Section.

A new tab will appear named **ERD:Stock Records** which shows some UK stock. In fact it contains all UK stock and you can scroll down the list by using the slider control at the right of the screen. The **About My ERD** tab is still there and you can see it by clicking its tab. Do this now and then click the **Stock Records** tab again. To close the **Stock Records** tab press its close button (X) on the right hand side of the tabs area so do this now.

Our object is to make a backup of our data and this is done through the **Save File As** option of the **File** section so press **Save File As** now.

- The **SaveFile** window appears and you should read what it says.
- When you have done that press **Continue**.
- A file dialog screen appears with the current directory set at ERD2012 and a default file name of "backup." In the file name box type "Original Data File 2012" then press **Save**.
- The **SaveFile** window will report progress and details will also appear at the bottom right of the screen.
- When the window closes the data has been saved and you have a backup of the data as supplied with ERD2012.

We have now created the backup and we can carry on with the tutorial.

4.2 Recording details of your visits.

This tutorial will take you on an imaginary trip on the UK railway system and guide you through the methods by which you can record your observations in the database. After you have finished I will show you how to restore the data to return ERD2012 to the original unused state.

Let us imagine that you are in London and you go on a day trip to Burton-on-Trent travelling out via Derby and back via Birmingham. Quite why you should want to do that I do not know but it is an imaginary outing after all.

The following timetable shows your trip in a bit of detail.

Timetable for 17th June 2011.

<u>Arr.</u>	<u>Location</u>	<u>Dep.</u>	<u>Loco 1</u>	<u>Loco 2</u>	<u>Train detail.</u>
	St. Pancras.	09.25	43066	43064	Midland Main Line
11.05	Derby	12.08	50111	79111	Central trains.
12.20	Burton.	13.19	50114	79114	Central trains.
13.54	Birmingham	16.44	390002		Virgin trains.
18.53	Euston				

On the trip you made the following observations.

St. Pancras to Derby.

43064/66/206/207 50505 52795 57795 60002 60181/210/261/310/410/641/710/931 79505 319011/433/442/459.

Derby to Burton on Trent.

50111/107 55107 79111/107 60206/306/406/706 66611

Burton-on-Trent to Birmingham.

08528 37667 50114/511/518 52406 57406 60769/969 66056/618 79114/511/518 323241/242/243.

Birmingham New Street.

50512/513/517 52786 57786 60212/312/371/412/471/712/771/871/971 79512/517 321409/414 323203/208/213 390002/006/008.

Birmingham to Euston

08709 47816 57305 60027 66126/206/520 60367/467/767/867/967 87026 92038 390028/036.

Start up the program if it is not already running by clicking on start and then **Erd2012**.

You are currently in the process of recording your visit today so click on **Visits** in the Recording section of the ERD Menu.

A new tab appears with a black heading bar, a data section in grey with data boxes in white and a control section at the bottom.

The cursor is in the box below the "Ref" heading and this box will hold your own unique reference for this visit. Let us call it visit 1, it can be anything but it must be a unique reference. Type [1] in the box where the cursor is. Nothing happens. This is a feature of ERD2012 and ensures that no data can be inadvertently entered or changed unless you enter the editing mode. At the base of the tab in the controls section to the left hand side are a pair of radio buttons:-

- **Allow edits**
- **Stop edits**

On all of the windows, **Stop Edits**, is the default selection and before any data is entered or changed you must select **Allow Edits**. Do this now by pointing at the **Allow Edits** button and clicking. **Allow Edits** is now selected and the area around the controls turns red. This is another feature which applies throughout ERD2012 and reminds you that you are in editing mode. Click on the white box below the "Ref" heading which is where the data for the visit reference is held and enter [1]. A new row appears and the figure 1 appears in the field. Press the **TAB** Key which takes you to the next box across. (The term field refers to the data box and I will normally use the term field for the data instead of using the term box.)

The next field is the "Date" field so enter [17/06/2011] which is the date of the visit. Dates must be entered in this format and an input mask is provided to aid you in this. Then **TAB** to the "title" field. Here you enter your own description for the visit. Type [First visit to Burton on Trent] and press the **TAB** Key to go to the "Notes" field. Here you enter some notes about the visit so type the following if you wish.

[This trip is a purely fictitious visit to the great brewing town of Burton on Trent. I imagined that I travelled out from St. Pancras on a high speed train to Derby where, I changed onto a Central Trains diesel multiple unit for the short ride to Burton on Trent. As can be seen from the time table I spent an hour on the station and saw nothing.

I then caught another Central Trains service to Birmingham where I spent an enjoyable couple of hours on the platforms before catching a Virgin pendolino back to Euston and home.]

If you need to change anything that you have typed you can use the mouse to click on the field you wish to edit and edit the contents as required. When you have finished click on **Stop Edits** and then close the tab by clicking the "X" at the right hand side of the tabs.

Next click **Haulage** on the ERD menu to show the **Haulage** entry tab. This tab is similar to the last with the data section in grey between the headings section and the controls sections. Below the "Ref" heading is a selection box edged in red. These boxes appear throughout ERD2012 and enable you to select data according to what is selected in the selection box. Click on the "V" to the right of the selection box and a list of the available options will appear as follows:

- all trips
- First visit to Burton 17/06/05.

If you select "1 First visit to Burton 17/06/05" the tab will show details for that visit only but since we haven't yet added any haulage details it is empty.

Select the **Allow Edits** radio button at the bottom of the tab to allow data to be entered. Click on the ref field in the data section of the tab and type [2] and then click on the ref field on the next line. After a while a message appears to say, in "Microsoft speak", that there is no trip having a reference number 2. The haulage tab will only allow you to insert data referencing trips which have previously been entered via the visits tab, so click on **OK** and go back to the Ref box and change the entry to [1] then **TAB** to the Country field. Enter [United Kingdom] and **TAB** to the date field. Enter [17/06/2005] in that field and **TAB** to the start location field which is two boxes across. Enter [St. Pancras] and **TAB** to the Dep field. Enter [09:25] and **TAB** to the First loco field. Enter [43064] then **TAB** to the second loco field. Enter [43066] then **TAB** to train detail. Enter [Midland Mainline] and **TAB** to distance. Enter [150] and press **TAB** to go to the next record.

You can now enter [1] again or press **Ctrl+“@”** which will repeat the entry from the line above. As usual to enter **Ctrl+“@”** you hold the **Ctrl** key down and press the **“@,”** key. This feature also applies throughout ERD2012 enabling you to repeat data from the field above easily. Continue to enter the next record in the fields from the timetable given earlier as follows.

<u>Field</u>	<u>Data</u>
Ref	1
Country	United Kingdom
Date	17/06/2011
Arr.	11:05 (you will not have to type the colon)
Start Location	Derby
Dep	12:08
First Loco	50111
Second Loco	79111
Train details	Central trains
Distance.	12.

Continue in this manner to enter all the data inserting your own distance estimates from the timetable given previously. When you have finished close the tab to ensure the data has been saved.

Next click **Haulage** again because now you are going to enter your sightings into the database for this trip. The **Haulage** tab appears with the details of trip 1 visible. Hold the mouse cursor over the first date of 17/06/2011. After a few seconds a yellow box appears which says "This is the date you were hauled – Double click for diary page". This is another feature of ERD2012 – hints. By holding the mouse for a couple of seconds over virtually anything on a tab a box will appear with some information and/or help. Hold the mouse over the Ref selection box and then the **Diary Form** button to see these hints in action.

Either click the **Diary Form** button in the controls section or double click one of the 17/06/2011 dates to bring up the **Daily Diary tab**. This is where you can record details of the days events. It can be in the form of a diary whereby you write notes of how your day went or you can record details of the sightings you made or a mixture of both. The facility for making notes on the days events is more applicable to trips of more than one days duration since the notes you made earlier about trip 1 apply generally to that trip whereas individual days events can be noted in the **Daily Diary**.

Enter the date [17/06/2011] into the date field and then click on the Diary Notes field. Enter the sightings made as noted earlier in this field. When finished close the tab.

Back on the **Haulage** tab click the **Diary Form** button again to bring back the notes you have just made. The button will open the **Daily Diary tab** with the date of the selected record. The selected record is indicated in the column at the left of the tab data section by a black arrowhead. Close the **Daily Diary** tab.

Go back to the Haulage tab and click on the **Preview Report** button. This brings up another tab with an A4 size report of the tab. Close this tab when you are ready and press **Print Report** if you have a printer connected to your computer, this will send the report to your default printer.

Press **Preview Report** again to bring up the report tab. You can adjust the way the report is printed by pressing "Ctrl + P" which you do by holding down the "Ctrl" key and pressing the "P" key on your keyboard in the usual way. Do this now and a pop up window appears which is your usual print dialog box and gives you more control over what is printed and where it is printed. This will be useful later if you want double sided printing or to print one page say of a 100 page report! When you are done close the **Print** window and the **Haulage Report** tab.

When the print out is complete. Take a look at the report to see where the information you typed in appears. If trip 1

had lasted another day then the next day would also be printed out below the first.

Close the **Haulage** tab as you have finished with entering details of this trip.

4.3 Entering your Sightings/Haulages.

It is time to start telling ERD2012 what you have seen and been hauled by. Up to now the information you have put into ERD2012 will not affect the records of the actual vehicles in the database.

Firstly we will record your sightings by clicking **Sightings** on the **Recording** section of the ERD menu..

This will bring up the **Sightings Entry** tab with "UNITED KINGDOM" stock listed by default. If you have other countries in your system you will be able to choose which countries data you view by using the **Country** selection box at the top of the tab.

By default, vehicles of all types (***) are listed. By clicking on the "type" selection box and choosing a different type the stock list changes to that type. Try it now by clicking the drop down selector of the type selection box and choosing "E" for Electric locos. The data section changes to show only electric locomotives. Now select diesel locos by selecting "D" from the Type selection box.

There is a slider bar on the right hand side of the tab which is used in the usual windows manner. To move up and down the data listed point to the slider and drag it up and down. While you click on the slider some details of the total number of vehicles in the current selection appears. In my version, which may be different to yours, the slider shows that there are 6045 records.

In the class selection box the class of locomotives can be selected. Click on the selection box and choose "43" (you may have to use the slider to scroll through the classes) this will then restrict the data displayed to class 43 diesel locomotives. Click on the forms slider again and you will see that the number of records has changed, on my computer it now shows 246 records. As a matter of interest class 43x is the old class 43 which were the Warships and these are also in the database as are all diesel and electric locomotives which have ever been operated by BR.

The next selection box is the Works Number into which you can type a number and search for stock having that works number. It is most useful for European Private Stock. The next selection box is the Running Number into which you can type a number to search on. Type 43206 then Return now and the screen will change to show only loco 43206. Delete the number from the selection box and all class 43 locos will again appear. You can type into most of the selection boxes instead of using the drop down lists if you wish.

The next selection box is the Status box. This allows you to choose the status of the vehicles to be displayed. The status of a particular item is as follows.

"c"	representing "seen"
"h"	representing "hauled"
"u"	representing "user defined" which is whatever meaning you wish.
"n"	representing "needed"

The status selection box also allows you to select all for "all stock" which is the default.

As you have not yet seen anything selecting either "c," "u" or "h" will result in an empty list of records while selecting, "n" will give the same list as "all".

The next selection box is for the Private Number which is most useful for European Private stock which carries a private operator as well as a UIC number.

The next selection box enables you to select the Depot to which the item is currently allocated. So if you wanted to list all class 43 diesels, allocated to Laira (LA) which you need (ie. not seen or hauled by) then you would select "n" in the status selection box and "LA" in the depot selection box. Try it now. On my computer the slider shows that there are 30 records. I therefore need 30 class 43's which are allocated to Laira. When ready close the Sightings Entry tab.

Click on **Sightings** again to reopen the Sightings tab. There are two further selection boxes at the top of the tab labelled Operator which allow you to select privately owned vehicles ("P") or state owned by ("S") and the operator reference code. Although everything in the UK is privately owned ERD2012 uses "S" for UK vehicles in this field since there is a national numbering system. The P/S field is of more use for continental vehicles and in particular those from Germany,

where there are a lot of private vehicles as well as DB owned state vehicles. Another option in the P/S field is "M" which represents museum or preserved vehicles and "H" for historic.

We will now tell ERD2012 we have seen the two class 43 locomotives 43206 and 43207 but first close down the **Sightings Entry** tab and go back to the **About My ERD** tab.

At the left hand side of the **About My ERD** tab details are shown of the quantity of operational vehicles. The total operational vehicles in the database is shown as is the total you have seen and the total you have been hauled by. At present there will be zero adjacent to seen and hauled as you haven't seen or been hauled by anything yet. Below these figures there is the outline of a box. The colour of this box will change as you see or are hauled by vehicles. It will turn green as you see vehicles and red as you are hauled by them. So if you have seen 50% of the vehicles then the left half of the rectangle would be green. This will become more apparent as you begin to use ERD2012.

Go back to the **Sightings** tab by clicking on **Sightings** so that we can tell ERD2012 that we have seen 43206 and 43207. You can either choose class 43 in the class selection box and then use the slider to find 43206 or you can use the slider straight away to find 43206. Alternatively you could type "43" into the Class selection box or 43206 in the Running Number selection box.

When you have found it you tell ERD2012 that you have seen it by pointing to its status field with the mouse and clicking. Try this now. Nothing happens. You do, of course, need to choose the **Allow Edits** radio button as you did before to enable you to change the status of any item. Do this now and then point to the Status field for 43206 and click. 43206, its status and its depot turn to green indicating you have seen this locomotive, at the same time the status field becomes "c". Do the same for 43207.

Choose the **Stop Edits** radio button so that you will not inadvertently change any other data. Then point to the number 43206 and double click. The full stock record for 43206 appears. This window could also have been viewed by clicking the **Full Record** button of the **Sightings** tab. To show you that a further more detailed window can be accessed by double clicking on the number it is underlined. This is general throughout ERD2012 and any field which is underlined can be double clicked for further information. Various details of this locomotive are stored and if you wish you can record the following additional information.

- The date you saw the locomotive
- The location you saw it.
- The number of times you have seen it
- The date you were hauled by it
- The number of times you have been hauled by it
- The total distance you have been hauled by it.
- Your own notes relative to that particular locomotive.

It is entirely up to you how much, if any, if the above information is recorded.

It is also possible with ERD2012 to relate particular photographs on your computer to particular locomotives. To do this click on **Change Picture**. A file selection dialog box appears and using this you can navigate to the relevant folder and choose a picture to associate with the loco.

Next click on **Preview Report** and an A4 report will be previewed which can be printed by pressing "Ctrl + P" as before or choosing the **Print Report** button from the **Full Stock Record** Window. Close down the **Full Stock Record** window and return to the **Sightings Entry** window.

Next we will enter the haulage from St. Pancras to Derby. We need to find the two HST power cars 43064 and 43066. First find 43057 using the slider bar if necessary. The status is currently "n" meaning "needed" and we want to change this to "h" for "hauled". First select The "Allow Edits" radio button as before and then click on the status box for 43064. The status changes to "c" and the loco is highlighted in green. Click again on the status box. This time the status changes to "h" and the loco is highlighted in red showing we have been hauled by it. By clicking again the Status would change to "u". As before you can double click on the number to see the full window and add further information if required. Next, find 43066 and mark this as hauled as you did for 43064.

What do we do if we have made a mistake and we have clicked on the wrong locomotive. Well, just double click on the status field and the status will return to "n". Try this now with 43066 to return its status to "n" then turn it back to "h" clicking twice (but not double clicking!). Next close the **Sightings Entry** tab by using the "X" in the top right hand corner of it.

You should now be able to go through the rest of these imaginary sightings and input both the sightings and haulage

into ERD2012. When you have done this return to the About My ERD tab again. On it you are informed that you have now seen 88 vehicles and been hauled by 7, still a long way to go.

You may wish to take a break there as we have covered quite a lot, so to close down ERD2012 simply press **Exit** on the Home section of the ERD menu. Don't forget to send off your registration form to get your password.

4.4 Obtaining Printed reports.

The next task is to obtain some printed reports of the information contained in the database for your records or to take with you on your trips. There are a number of different reports possible but for now we will concentrate on stock listings and consider other reports later.

The best place to obtain stock reports is from the **Stock Reports** tab so click on **Stock** now.

This tab is similar to the **Sightings Entry** tab we used earlier but contains more information.

Depending on your monitor resolution the **Stock Records** tab can be wider than your screen and to see all the information you can use the slider bar.

In the data section of the tab the following fields are displayed:

- Country
- Type
- Class
- Year built
- Works Number
- Prefix
- Number
- Chk
- Status
- Private Number
- Depot
- Operator
- Original Number
- Name
- Set Number
- Previous Numbers
- Comments
- Withdrawn Date
- Pool Code
- Livery Code
- Date 1st Seen
- Location Seen
- Times Seen

All of the fields can be edited when **Allow Edits** is chosen.

On the **Sightings Entry** tab the running number was a combination of the prefix, number and chk fields which are the three parts of the running number. A more detailed explanation of these three parts follows:

Prefix: This is that part of the running number which is not numeric. In the UK when diesel locomotives were prefixed with "D" then the "D", not being numeric, would be stored in the prefix field. In France, DMU's are prefixed with an "X" and shunters with a "Y". The "X" and "Y" would, in this case, be stored in the Prefix field.

Number: This is that part of the running number which is purely numeric and can be sorted numerically rather than alphabetically. The number is usually a shortened version of the vehicle UIC number. In some cases, however, non numeric data can be entered in this field.

Sometimes two vehicles have the same number. This is fine if either the Country, Type, Works Number or Class is different for then each of the two vehicles is distinct in the database. On those rare occasions when this is not the case ERD2012 distinguishes between them by adding a number in brackets after the vehicles Number. In the UK data there are no vehicles like this.

chk: This is the check digit which is a code, calculated from the running number and used in Germany, Austria, Switzerland and the Czech/Slovak Republics.

If you double click the check digit box a window will pop up which calculates the check digit for you and changes the value in the field to the calculated value. With UK numbers generally it just shows an error since it is not relevant. It will give a result for 6 digit numbers though but will not change the field value in this case since check digits are not used in the UK!

Year Built: This is the year the vehicle was built.

Works Number: This is the manufacturers works number and should be unique for a given class.

Private Number: This is the number given the vehicle by a private operator and may change frequently.

Operator: This field is in two parts. Firstly the field which shows whether the vehicle is state owned (S), privately owned (P) or museum stock (M). The second field shows the code for the private operator.

Original Number: This field holds the first number carried by the vehicle if the number has changed.

Name: This field contains the name carried by the vehicle.

Set Number: This is the set number for multiple units. For class 170 UK DMU's for example, vehicles numbered 50101, 79101 and 55101 will all have set number 170101.

Previous Numbers: This field contains the numbers carried by the vehicle, where known, between the original number and the current number.

Withdrawn Date: The date on which the vehicle was withdrawn from service.

Pool Code: The pool code to which the vehicle is allocated.

Livery Code: A code representing the livery carried by the vehicle.

Date 1st Seen: The date on which you saw the vehicle for the 1st time.

Location Seen: The location where you saw it.

Times Seen: The number of times you have seen the vehicle.

We will now obtain a report of all class 43 locomotives. Firstly ensure that the following choices are made in the selection boxes:

County:	United Kingdom
Type:	D
Class:	43
Depot:	* (All Depots)
Operator:	S
Status:	all

The statistics box at the bottom left of the stock records tab on my computer shows a total of 246 class 43 locomotives with me having seen 2, been hauled by 2 and need 194. Of course I have actually seen 4 since I also saw the two I was hauled by!

Click on the **Reports** Button and the **Stock Reporting** window will appear. This gives a number of options.

- Size (A4, A5 or A6 booklet)
- Grouping (Type, Class or Depot)
- Whether or not highlighting is to be applied.
- Report Format (Standard, detail, private or museum)

The defaults are:

- A4 report
- Group by Class
- No highlighting
- Standard format.

Press the Preview button and a report preview window appears. The report may be printed on your printer by pressing “Ctrl + P” as before or by pressing the Print button on the Stock Reporting Window.

ERD2012 contains three new reporting formats.

Reports with private stock depots as the operator: This shows, in the depot field, the private operator code.

Private Detail Report: This shows works numbers, year built and private numbers as well as number and operator codes.

Museum Detail Report: This shows similar information to the Private Detail Report.

Close the **Stock Reporting** window and click **Reset Selection** on the **Stock Records** tab. This resets the selection boxes. Choose Germany and P in the operator selection box. Click **Reports** and choose Private Detail Report then click **Preview**. You will see the type of information contained in the Private Detail report.

Experiment with the various options now to see the type of reports available. When you have finished close the **Stock Reporting** window and then close the **Stock Records** tab.

4.5 Changing Depot Allocations.

As we know, vehicles are allocated to various motive power depots. These depots are all given a code and the **Stock Records** tab will enable you to select the vehicles which are allocated to a particular depot. Open up the stock records tab now by pressing **Stock** on the ERD menu to view the class 43’s allocated to NL by choosing NL in the Depot selection box and 43 in the class selection box.

The statistics boxes on my computer show that 30 are needed and we can list these by choosing “n” in the Status selection box. We can therefore obtain a list of all class 43 locos needed which are allocated to NL. Useful if you plan to go there.

How do we change the code NL when vehicles are reallocated. One way would be to type in the new code in the depot field or choose it from the list box obtained by clicking the down arrow to the right of the depot field. Try this now by changing the depot code for 43007 from NL to PM say. (Don’t forget to select the **Allow Edits** radio button.) Then change the code back to NL as it hasn’t been re-allocated!

There is another way however, the **Stock Reallocations** tab.

Close the **Stock Records** tab and click on **Stock Reallocation** on the ERD menu and a tab similar to the **Sightings Entry** tab will appear.

Choose “D” in the Type selection box and “43”, in the class selection box and find 43007. The depot field is in the form of a list box and the depot code can be changed to one of the codes already in the database. In fact you can only change the code to one of the codes listed in this list box. After choosing **Allow Edits** (I won’t say this again – promise) select PM in the selection box for 43007’s depot allocation. We need to change it back again so type [N] in the selection box for 43007’s allocation code then click on the drop down arrow. The list now starts with NC, as you have already typed in the “N “. Choose NL to return the depot to its original value.

What happens when a vehicle is withdrawn? ERD2012 records this by using the code “w” for the depot allocation of withdrawn vehicles which can be selected in the selection box as for any other depot. A shorter way to change the allocation to withdrawn is to point to the depot code on the Stock Reallocation tab and double click. Try this with 43008 now and as you will see the code changes to “w”. You can change the code back to EC by pressing the Esc Key on the keyboard which will undo the most recent data change you have made. Do this now to change the code back to EC.

When a vehicle is renumbered the depot code is changed to “r” and a new vehicle is put into the database.

Close down the **Stock Reallocations** tab when you are ready.

4.6 Entering New Vehicles.

Once in a while new vehicles are added to a country's fleet and there is a way of adding new stock to the database with ERD2012.

Let us say that a new class 66 has been built numbered 66350.

Click **New Stock** to see the **New Stock Entry** tab.

In the data section of this tab there are various boxes into which the data can be added. First of all select "UNITED KINGDOM" for the country field by using the drop down list box. (When you selected "UNITED KINGDOM", ERD2012 added a second row but do not go to this now as an error will be generated. If you want to see the error click in the box below "UNITED KINGDOM" then click OK on the error message box. The error message was generated since ERD2012 tries to save the record once you click in the box below the current record. Each vehicle in the database must have data in the following fields. Country/ Type/ Class/ Number/ Works Number and there must be no other record having all of these fields the same to ensure that the records are unique. Empty fields are not acceptable and so the error message appears.)

Next select or type the following in the other fields along the top now:

Type: D
Class: 66
Number: 66350
Operated: BR

Then click on the county field on the next line to save the record. This can also be achieved by clicking the **Save** button at the bottom of the tab.

Select the record by clicking the box to the left of "UNITED KINGDOM". The box will turn black with a white arrow pointing to the right to show that you have selected the 66350 record. Then click the **Show Full** button at the bottom of the tab and the **Full Stock Record** window will appear as before. Here you can enter further details on the vehicle if you wish. Close down the **Full Stock Record** Window and select the 66350 vehicle record as you did before. Press the **Delete** button on your keyboard and the imaginary class 66 will be deleted from the database. Had you wanted to leave the vehicle in the database you could have just closed down the **New Stock Entry** Tab.

If you want to delete any other vehicle from the database this can be done from the **Stock Records** tab by selecting the vehicle and pressing the delete button on your keyboard when in **Allow Edits** Mode. Try this now by opening up the **Stock Records** tab, entering 66350 into the database again using **New Stock** on the ERD menu to open the **New Stock Entry** tab. Saving the record then finding it in the **Stock Records** tab and deleting it.

4.7 Renumbering Existing Vehicles.

Sometimes vehicles are renumbered due to their being refurbished or for some other operational reason and ERD2012 needs to be updated to reflect this change.

Annual updates mark renumbered vehicles with a depot code of "r".

As an example the following procedure changes the number of 66001 to 00301 and then back again.

- Open the **Stock Records** tab.
- Navigate to 66001
- Choose **Allow Edits**.
- Change the depot code of 66001 to "r" noting its original value..
- Open the **New Stock** tab.
- Enter a new class 66 loco numbered 66301.
- Insert [66001] into the original number field for 66301.

You can then change the status of the locomotive to [n] if you wish.

To undo these changes simply delete the new loco and change the depot code of 66001 back to its original value.

Then close the **Stock Records** and **New Stock** tabs. It's as simple as that.

Well, quite a lot of ground has now been covered since the last break so I suggest you take another break. Before you carry on with the tutorial I suggest you read through everything again to reinforce the ideas you have met.

4.8 Classes.

Every vehicle in the database is a member of a general class of vehicles. Details of the various classes are stored in the database and the information can be accessed from the **Data** section of the ERD menu by selecting **Classes** (how else I ask myself!)

Do this now and the **Class Listing** tab will appear showing the diesel classes in the UK.

With this tab the selection boxes allow you to choose the country and the type of vehicles whose classes you wish to view.

Choose "E" in the **Type** selection box and all the classes of electric locomotives in the United Kingdom will appear in the data part of the tab.

If you wish to change the data you can do this by choosing **Allow Edits** as usual and editing the data.

A class can be deleted by selecting the record and pressing the **Delete Class** button or the **Delete** Key on the keyboard. The vehicles of that class will not be deleted, only the details of the class.

As you can see on the **Class Listing** tab there is quite a lot of information immediately listed for each class. To see all the information for a particular class select it with **Allow Edits** selected it and press the **Full Record** button. Do this now for class 66.

Another window appears, the **Class Details Full Record** window, and this shows additional information for the class together with a picture if one has been defined for this class. All of the data, except the country and the type can be edited on this window by selecting **Allow Edits**. This window could also have been accessed by double clicking on the class field.

The picture can be changed to enable you to provide your own pictures of each class or deleted by pressing the appropriate button.

A report on the class can also be obtained by pressing the **Preview Report** button. Do this now and a preview of the report for class 66 will appear.

In addition to data on the class and a typical picture of the class, if one has been defined, a listing of all vehicles of that class will be included.

If the highlighting radio button had been selected on the **Class Listing** tab then the vehicles will be highlighted on the report otherwise no highlighting will be applied.

The full detail report can be printed onto your default printer by pressing the **Print Report** button or by pressing "Ctrl + P" and choosing print as has been described before.

Close down the **Full Detail** Window and return to the **Class Details** tab.

A different type of report can be obtained from the class listing tab to reflect the information shown on the tab. Press the **Preview Report** button and a preview of this report will appear which is in the form of a listing giving the same information as on the **Class Listing** tab. This report can be printed in the usual way if required.

Close down the **Class Listing Report Preview** window and return to the **Class Listing** tab.

The right hand column of the **Class Listing** tab gives the total number of vehicles for each class in the database. Further information on totals can be obtained by pressing the **Statistics** button. Do this now to bring up the **Class Statistics** tab.

This tab shows further information on how you are doing in your quest to see or be hauled by everything. Columns included show how many of each class you have seen/been hauled by together with the relevant percentages. This report can be previewed and printed out in the usual manner.

Close down the **Class Statistics** tab and return to the **Class Listings** tab.

The **Highlighting** radio button on the tab performs two functions.

When it is selected the classes having a photograph defined will be highlighted.

The other function of the highlighting radio button is to tell ERD2012 that in the report accessed from the **Full Record** window the vehicles which you have seen should be highlighted in green and those which you have been hauled by in red. This will of course only show up as red and green when you use a colour printer for your hard copy!

Close down the **Class Listing** tab.

We will now consider Depots.

4.9 Depots.

As with classes, every vehicle in the database is allocated to a particular depot and the depots can be viewed by clicking **Depots** on the **Data** section of the ERD menu. Do this now to bring up the **Depot Listing** tab.

This tab shows all the depots in the United Kingdom by default and you can view depots in other countries, if you have them, by choosing them in the country selection box.

Each depot forms part of a nominal region and in the UK I have allocated depots to the following regions:-

- Eastern
- Europe
- General
- London Midland
- Midland
- Museum Location
- Netherlands
- North Eastern
- Scottish
- Southern
- Spain
- Western

You can of course change these if you so desire.

Select London Midland in the Region selection box to see all depots which are part of the London Midland region.

As you visit depots you can click on the Visit tick box to record the fact that a visit has been made. Try this with Allerton – AN. Don't forget to select **Allow Edits** first! When you have ticked the Visit tick box the depot is highlighted in green, after you have clicked **Stop Edits**, to show that a visit has been made. As usual this highlighting can be turned on and off with the highlighting radio button.

You will note that when **Allow Edits** is selected the Reports button is greyed out and the Allocation Column numbers disappear and are replaced by "ame?" Select **Stop Edits** to bring them back.

The allocation column shows the total number of vehicles allocated to each depot. Click on the first Allocation box which is for unallocated stock (on my computer its value is 5172). Then click the drop down Menu titled **RECORDS** from the Add-Ins menu at the top of the screen and a series of menu options appears. If you choose **sort descending** from this menu the depot order will be changed to show the depot having the largest allocation.

Click on the allocation box again and this time choose **sort ascending** from the **RECORDS** menu option. This time the depot with the smallest allocation appears first.

This trick can be used generally throughout ERD2012. If you want quantities in ascending or descending order then click on the relevant box and pick either sort ascending or sort descending from the **RECORDS** menu.

Finally, from the **RECORDS** menu choose **Remove Filter/Sort** to remove the applied sort arrangement from the Depots List to stop this arrangement being used next time you open the tab and a possible error being generated.

Close down the **Depot Listing** tab and then open it again. You will see that the first depot listed has a code of ".." This is for vehicles which are not allocated to any depot. It is of particular use when new stock is built and the number

system is known but the vehicles are not yet operational. The unallocated stock code can be used.

A depot can be deleted by selecting its record selector and by either pressing the **Delete Depot** button or the **Delete** key on the keyboard. If you delete a depot the vehicles allocated to it will not be deleted.

Reports can be generated by pressing the **Reports** button which brings up the **Depot Reporting** window try this now.

The **Depot Reporting** window allows you to choose whether the report is highlighted to show which depots you have visited or not and allows you to choose between three sizes of report:

- **A4 report**
- **A5 report**
- **A6 booklet**

By default an A4 un-highlighted report is selected. Click the **Highlighting** radio button and then press the **Preview** button. A window appears to give you a preview of the depot report with AN highlighted in green assuming you did not de-select it as being visited.

This report may be printed out in the same way as other reports. Close the **Report Preview** window and then the **Depot Reporting** window to go back to the **Depot Listing** tab.

Select **Allow Edits** then find the AN record then point to the depot code "AN" and double click.

The **Full Depot Record** Window appears.

Double clicking can be used in several places in ERD2012 to show further information about the item being clicked on. In this case the **Full Depot Record** window could just as easily have been opened by clicking on the **Full Record** button. Information on where double clicking can be used will appear in the hint which becomes visible when the mouse is hovered over a particular item for a few seconds. Fields which are underlined generally provide more data when double clicked.

This window allows you to make your own notes about the Depot and to give yourself some directions to remind you how you found the depot in the first place.

You can also link a picture of the depot to the record if you have one in the same way you can link a photograph to vehicles as described previously.

Clicking on **Preview Report** will bring up a window to show the **Depot Report** tab.

The report will include your photograph together with details of the depots allocation of vehicles. The report may be printed as described before.

Close the **Report Preview** window when you are ready.

Then close the **Full Depot Record** window and the **Depot Listing** tab.

Another opportune moment for a break so close down ERD2012 and have a cup of coffee before we go on to look at Countries and Stock Types – both of which should not take too long.

4.10 Countries and Stock Types.

Every vehicle in the database must belong to a country which is also in the database. The countries available to the user can be viewed by pressing **Countries** on the **Data** section of the ERD menu. Do this now to bring up the **Countries** Window.

If you only have the basic version of the software the only country available will be the "UNITED KINGDOM". ERD2012 can be upgraded at any time with data disks for other countries and the available countries mentioned earlier will be added to in time.

The abbreviation for any country can be changed, so, for example, if you prefer to give "UNITED KINGDOM" the abbreviation "UK" instead of "BR" you can do so. Try this by choosing the **Allow Edits** radio button then editing the abbreviation to "UK". You can also delete a country by selecting the record and pressing the **Delete Country** button. This will delete all information relevant to that Country from the database so use with care! It is not possible to change the name "UNITED KINGDOM" since to do so would render future data updates impossible.

It is also possible to add new countries to ERD2012 and this is done by typing their details into the empty row marked "*" at the bottom of the window.

By pressing the **Statistics** button another window, **Country Statistics**, appears which gives information of the quantity of vehicles in each country together with how many of the vehicles you have seen/been hauled by and the totals. A printed report of this information can be obtained by using the **Report Preview** or **Print Report** button.

Close the **Country Statistics** window and then the **Countries** window.

Next press the **Stock Types** button to bring up the **Stock Types** window. Here you will see all of the types of vehicles currently defined in ERD2012. The Type codes can be changed as can their descriptions. You could change the description of "Diesel" to "Diesel locomotives" and the type from "D" to "D1" if you wished and the charges would be reflected in the **Stock Records** window. If you were to actually change the stock type from "D" to "D1", say, then all diesel locomotives would have their type also changed to "D1". All classes of diesel locomotives would also have their types changed to "D1". For this reason I recommend you not to alter the standard types since types in the annual update disc will be the standard types and if you have changed the type code then the update disc will not work! As with the countries, a particular stock type could be deleted and all of the vehicles of that type would also be removed from ERD2012. This should of course, be used with some care but is useful if you are only interested in locomotives say, for then you could delete the other types here and all vehicles, other than locomotives, would be removed from ERD2012. A report of the stock types giving a listing of them can be obtained from this window by using the **Preview** or **Print Report** buttons. Close the **Stock Types** window as you have finished with it now.

4.11 Operators, Liveries & Pool Codes.

A lot of information is included in ERD2012 on operators, liveries and pool codes particularly for U.K. stock and the information can be viewed by pressing **Operators**, **Liveries** or **Pool Codes** on the **Data** section of the ERD menu.

On the **Data** section select **Operators** to bring up the **Operators** window which shows the operators and their codes for each country. The codes are the codes for Private Operators which we met before when we looked at the **Stock Records** window.

By choosing **Allow Edits** the codes, names and the countries can be edited.

Operators can be deleted by selecting the record and then pressing the **Delete Operator** button or the delete key on the keyboard.

A listing of all the operators in a particular country can be obtained using the **Preview/Print Report** button in the usual way.

By double clicking on the operator code or by selecting a particular operator and pressing the **Full Record** button another window, **Operators Full Detail**, appears which can be used to maintain information about the operator. Details of the lines operated are included for some of the operators particularly in Germany. A report giving full details of the operators in a particular country can be obtained from this window using the **Preview/Print** button as you have done before. Try this now by opening the **Operators Full Detail** window if it is not already open and pressing the **Preview Report** button. Then close the windows to get back to the control panel.

Next, on the **Data** section of the ERD menu, press **Liveries** and the **Liveries** window appears which gives details of the liveries defined for a particular country. It is similar to the **Operators** window described above but there is no **Full Record** window option since all the information on Liveries is contained in this window. The information can be edited and reports obtained as described before so experiment with this window now but don't forget to return any changes you make to their original values. When you are done close the window and return to the control panel.

Next press **Pool Codes** to open up the **Pool Codes** window. Only vehicles in the "UNITED KINGDOM" have defined pool codes and these can be edited and changed as described for operators. Pool codes can be deleted as usual and a report can be Previewed or Printed by using the relevant buttons. Close down the window and return to the Control Panel.

4.12 Stock Summaries.

The stock summaries are a series of reports giving detailed information about the quantities of vehicles in the database together with totals of seen/hauled vehicles. They are arranged in particular formats as follows.

1. By Country.

2. By Depot
3. By Depot & Type
4. By Depot & Class.
5. By Class & Depot.

The stock summaries are accessed from the **Stock Summaries** section of the ERD menu.

There is another option, entitled **Stock Picker**, which enables you to define some parameters about the vehicles you wish to include in the summary. Click on **Stock Picker** to open up the **Stock Picker** window.

This shows a selection box where you can select the country whose vehicles you wish to summarise. Its default value is "All Countries". Click on the box and select "UNITED KINGDOM". If you have not installed data for other countries this will be the only other option.

On the stock picker window there are also four radio buttons:-

- **Include State Stock.**
- **Include Private Stock.**
- **Include Museum Stock.**
- **Include "w" Stock.**

By selecting the radio buttons the stock described is included, or not included, in the summary totals. By default only **Include State Stock** is selected. Close the **Stock Picker** window now.

Next press **By Country** to open the tab which shows a list of vehicle totals by country. It is similar to the statistics windows we met earlier and gives the totals of the vehicles together with seen/hailed totals and percentages. A report can be obtained via the **Preview/Print Report** buttons as discussed earlier.

Close down the tab and press **By Depot**. This gives more detailed information than the previous window with totals given for each depot in each country. Again a report can be previewed and printed.

Close this tab and press **By Depot and Type**. After a while another tab appears which shows a further breakdown of the totals for each depot under type headings. This window will answer the question "how many diesel locomotives have I not seen which are allocated to Allerton depot", for example. Again a report can be previewed and printed.

Close this tab and press **By Depot and Class**. The next tab shows a further breakdown of the information. For each depot totals are given for each class. This tab will answer the question. "How many class 08 diesel locomotives have I not seen which are allocated to Bescot depot" for example. As before a report can be previewed or printed to obtain hard copy of the information.

Close this tab and press **By class and Depot** to open another statistics tab. This tab shows the same information as the previous tab but is grouped differently. It is best understood by viewing the report generated so press the **Preview Report** button. The report which appears groups the totals by class in that for each class it shows the depots which have an allocation of that class together with the totals seen/hailed. The previous report grouped the data by depot and for each depot showed the totals for each class allocated to the depot. I am sure that if you print out both reports and compare them side by side the different representations of the same data will become quite clear so do this now then close down all tabs.

4.13 File Tab.

The final section of the ERD menu contains two file system functions as follows:-

- **Save File As.**
 - **Load File.**
- a. **Save File As.**
This enables you to save the current data set to your hard drive with any name you choose. Press **Save File As** now. The **SaveFile** window appears and you should read what it says. When you have done that press **Continue**. A file dialog screen appears with the current directory set at ERD2012 and a default file name of "backup." In the file name box type "Original Data File 2012" then press **Save**. The **SaveFile** window will report progress and details will also appear at the bottom right of the screen. When the window closes the data has been saved.
 - b. **Load File.**

This enables you to load into ERD2012 previously saved data. Press **Load File** now. All open screens close and the **LoadFile** window appears and you should again read the information in it. Press **Continue** and after your current data has been saved the **Select Data File To Load** window appears. You have a list of files to choose from including the backup just made. Select the file "Original Data File 2012.accdb" and press **OK**. Information on progress will again appear in the **LoadFile** window and at the bottom right hand side of the screen. When the window closes the data has been loaded and the **About** screen reappears. It will take some time to do this so please be patient.

Well, apart from one final exercise that just about completes the tutorial. Before embarking on the final part another coffee break would probably be in order.

4.14 Definition of New Types.

The following section will guide you through the creation of a new type of vehicle in the database and will cover all of the processes needed to achieve this. In so doing it will cover some of the ground covered previously from a different perspective. Some new concepts will also be introduced.

Let us imagine that you have become interested in Manchester Busses and want to add them to the database. The following information summarises the information you have available on the busses.

Country :	United Kingdom.		
Type :	B (for busses).		
Class :	Double decker		
	Weight	:	45 tons.
	Length	:	12 m
	Wheel Arrangement	:	several
	Built	:	1991-2
	Builder	:	Tesco.
	Engine Power	:	520kw
Depot :	QRM (for "Queens Road")		
Livery :	DGW (for "Dark grey/white")		
Numbers:	1001/2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20/ 21/22/23/24/25/26		
Names:	1004 – "The Robert Owen" 1008 – "Manchester Airport" 1010 – "Manchester Champion" 1012 – "Kerry" 1013 – "The Fusilier" 1014 – "The City of Drama" 1015 – "Sparky" 1020 – "The David Graham OBE" 1021 – "The Greater Manchester Radio" 1022 – "The Graham Ashworth" 1024 – "The John Greenwood" 1026 – "The Power."		

Firstly you need to add the new type of vehicle, busses, to ERD2012 and to do this proceed as follows:

- Click on **Stock Types**
- On the **Stock Types** window choose the **Allow Edits** radio button.
- The last line of data on the window is empty and is marked with an asterisk in the record selector on the left. In the empty description box type [Busses]. A new line is added ready for another type of vehicle. Move to the type box to the right of the description box and type [B] then click another box and the new type is added.
- Close the window.

You now need to add the new depot to ERD2012 as follows:-

- Click on **Depots**
- Choose **Allow Edits** and scroll to the bottom of the data.
- As before there is an empty record marked with an asterisk waiting for the new data so in the country box type or choose [UNITED KINGDOM].
- In the Region box choose "London Midland"
- Type [QRM] in the depot box and [Queens Road – Manchester] in the Name box.

- Click on another row to save the data then close down the window.

You have now added a new depot and a new type of vehicle to the database, next we need to add the class information so proceed as follows.

- Click on **Classes**.
- Choose **Allow Edits** and scroll to the bottom of the data section.
- Enter the following information in the empty row:

Country	:	"United Kingdom"
Type	:	"B" (now an option in the selection box)
Class	:	"Dopuble Decker"
Class Name	:	"Manchester Busses"
Built	:	"1991-2"
Builders	:	"Tesco"
Power	:	520
Weight	:	45
Wheel Arrangement	:	"several"
Length	:	12

- Choose **Stop Edits**

You will need to select type "B" and scroll down the data after you have chosen **Stop Edits** to find the new class again.

We can now add the livery to the database so proceed as follows.

- Click **Liveries**
- On the Liveries window click **Allow Edits** and scroll to the bottom.
- In the Country box choose [UNITED KINGDOM] or type it in.
- In the code box type [DGW]
- In the description box type [dark grey/white]
- Click on one of the other records to save the new record then close down the window.

We now need to enter a new private operator:

- Click on **Operators** to open up the **Operators** window.
- Click **Allow Edits** and navigate to the last record which is empty.
- In the Country box pick "UNITED KINGDOM"
- In the code box type [GMM]
- In the Name box type [Greater Manchester Metrolink].
- Click on **Stop Edits** then close the window.

We are now ready to enter the vehicles themselves into the database so proceed as follows:

- Click on **New Stock** to open the **New Stock Entry** tab.
- In the Country field choose "UNITED KINGDOM".
- In the Type Field choose "B"
- In the Class field choose "Double Decker"
- In the number field type [1001] for the first vehicle.
- In the depot field choose "QRM"
- In the owned field choose "P"
- In the operated field choose "GMM"
- Click on the next country box and repeat the process with vehicle numbered 1002.
- Carry on in this way until you have entered all of the vehicles including the names where applicable. Don't forget that to repeat the information from the box above you can use the key combination Ctrl+ "@" as discussed previously.
- When you have finished close down the **New Stock Entry** tab.

You now have a new type of vehicle in your database and details of the vehicles can be viewed or listed exactly as previously described.

That finishes the tutorial except for one thing. We still need to restore the information to its original state before you

made the changes. The next section will guide you through performing this task.

4.15 Restoring the original data.

It is possible to delete several items at the same time so first of all I will show you how to do this with the trams we have entered so please proceed as follows:

- Click on the Stock button.
- Choose Allow Edits.
- Select "B" for busses and the busses appear in the data section.
- Click the record selector for the first bus.
- Hold down the shift key, point to the record selector for the last bus and click the mouse. All of the record selectors should turn black.
- Press the delete key on your keyboard.
- Confirm by choosing "Yes".

You have now deleted all of the busses and a similar method can be used for deleting any group of data.

Next we will restore your original data from the backup file we made earlier using the **Load File** option.

- Press **Load File**. All open screens close and the **LoadFile** window appears and you should read the information in it.
- Press **Continue** and after your current data has been saved the **Select Data File To Load** window appears.
- You have a list of files to choose from including the backup made earlier. Select the file "Original Data File 2012.accdb" and press **OK**.
- Information on progress will again appear in the **LoadFile** window and at the bottom right hand side of the screen.
- When the window closes the data has been loaded and the **About** screen reappears. It will take some time to do this so please be patient.

4.16 Summary.

You have now completed the tutorial and have been introduced to all of the main features of the software. I hope you get as much pleasure from using the software as I have over the many years it has taken me to write it.

4.17 Future.

Although this is the second edition of the software I am now working on the next edition but it won't be available for a few years yet though. I do have a few ideas for improving the system though. I would also like your help. If there is anything you would like the software to do please let me know and if it is feasible and enough people ask for it then I will include it in the next version.

Finally there are quite likely some errors and omissions in the data for which I apologise in advance. With a system this size there are bound to be some. If you spot any please let me know and I will endeavour to correct them in the annual update.

Mervyn John : February 2012.