# Processing Merit Marks Electronically

## A Short History of DB2000

In the distant past, merit mark submissions were created by hand using a 4 part form which could be filled out either by printing neatly, or by typewriter. The submissions were signed and mailed to the appropriate area monitor for approval processing. Any communication between the submitter and the area monitor was done either by mail or telephone. When the approved submissions arrived at headquarters as a four foot high pile of paper, they were entered into the respective member records manually; a slow and costly process.

In the late eighties, a piece of DOS based software was written by P/R/C Bill Crayne which allowed a computer to create the merit mark submissions. It had the ability to input, edit, and print the submissions and to store them in a file to be used as a base for the process in subsequent years. The submissions were still printed as 4 copies, signed and mailed to the area monitor.

In the late nineties, a Windows based piece of software, DB2000, made its first appearance, written by P/D/C Ken Guscott. DB2000 was conceived by its design team to be a squadron management tool capable of handling all the record keeping and reporting requirements necessary in a squadron.

It began as a replacement for the existing limited software products, Squadron Management Software (SMS) and Biographical Data Update (BDU), which provided a mechanism to dial into headquarters, request a roster, call back later and download the roster. Then the downloaded roster could be used in user supplied various products to create reports and labels.

DB2000 began as a simple database with the ability to import an encrypted roster from headquarters, received by email, to apply changes to the database. The changes could then be sent back to headquarters as an encrypted BDU file. Over the years, and countless versions, numerous additions and enhancements have been made, the most recent being support for Electronic Merit Mark (EMM) processing.

## Electronic Merit Marks Requirements

To process Electronic Merit Marks, you must have a personal computer running Microsoft Windows. The MAC is not supported unless it runs some type of virtualizing software such as Parallels or VMware is installed and Windows is installed under the virtualizer. We have users running Win/98 Win/SE Win/NT Win/2000 Win/XP; and various flavors of Vista.  At present Windows XP with SP3 is the preferred environment.

DB2000 communicates with programs and headquarters via the Internet thus you must have an Internet connection.

DB2000 communicates with headquarters by one of two ways; it either sends or receives files via an email attachment, or it communicates directly with the headquarters computers in real time using messaging software known as ‘MQSeries’. Email is slow, and, especially on weekends, not always available. ‘MQSeries’ connects directly with Headquarters and is usually available 24/7.  MQSeries is the preferred method and will make your job much easier.

***Note:***
***'MQSeries' requires that your security software and/or firewall permit TCP communications on ports 1414-1415. If you are running on a corporate installation, the company policies or the difficultly in opening these ports may preclude using MQSeries.***

In most private installations, problems are not usually encountered with 'MQSeries' and that makes using DB2000 very fast and convenient. Once installed, it is much easier and faster than email.

## Acquiring the Software

For a fully functional DB2000 installation, there are two necessary pieces of software, DB2000 and the MQSeries client. (As previously stated, Email can be substituted for MQSeries, if necessary).

The programs can be acquired on a CD from Lena Padro headquarters, or broadband users can download them from the DB2000 support site. The site URL is:

HTTP://WWW.ACCURECORD.COM/USPS/OUTGOING/DOWNLOADS.HTM

The DB2000 full install file is named ***DB2000R3.EXE*** and is about 10 Meg in size. Note that at least revision level 9.3.1 of DB2000 is required to support the current EMM features. The MQSeries client install file for XP and other NT based systems is named ***MACPENUS.ZIP*** and is also about 10 Meg in size.

The MQSeries client install file for Win/98, and Win/ME is named ***MACJENUS.ZIP*** and is about 4.5 Meg in size.

The MQSeries client install file for Vista (version 6.2) is named **MQC6_WIN.ZIP** and is about 135 Meg in size.

We strongly suggest creating a new folder on your machine directly under the root folder of your C: drive named **C:\DOWNLOADS.**

*You may create this folder by doing the following:*

Click the '**Start**' button

Then click or double-click, as appropriate for your system, on the '**My Computer**' icon to open '**My Computer'.**

Open Local Disc (C :) so that **C:**\ shows in the address bar at the top.

Click on the '**File**' menu in the top tool bar.

Select '**New**', and then '**Folder**':
(This will create a folder named '**New Folder**' and leave the name in a selected state.)

• Overtype the name '**New Folder**' with '**DOWNLOADS**' and then press enter.

***NOTE:***
***Some users' browser security settings are so restrictive that they prevent the browser from properly handling some of the links on the download page. This failure usually manifests itself in a message something like "This Page Cannot Be Displayed'. If this error occurs when you click on one of the links on the download page, do the following:***

Instead of left clicking on the link, right click on it.
This will open a context sensitive menu.
From this menu, select the option which is closest in meaning to **'Save Target As...'**.

This will open a dialog box which will allow you to navigate to the folder that will be used for the file download
.
Use the dialog to navigate to the **'C:\DOWNLOADS'** folder.

When the **'Save In'**: bar at the top contains **'DOWNLOADS'**, click on the **'SAVE'** button to download the file and save it in the **'C:\DOWNLOADS'** folder.

## Installing the Software

Before installing DB2000 using the full install file, insure that there is no existing version on your system. Do this by using the **'Control Panel' 'Add/Remove Programs'** applet. It will begin by creating an alphabetic listing of all of the software installed on your system. This sometimes takes a couple of minutes. When the search is complete, look for **'DB2000V3'** in the list.

If you see any previous version, select it and then click the '**Add/Remove'** button to uninstall the previous version.

***Have no Fear!*** This will not affect any existing databases or saved entries.

While you have the list of Installed software available, check to see whether there is an entry for **'IBM MQSeries'** or **'IBM WebSphere MQ'**. If there is, just remember that fact, so you won't have to download or install it later.

Installing DB2000 is no more complicated than locating the install file **'DB2000R3.EXE'**, in the **'Download'** folder, *double-clicking* on its name to start it, and then responding to a couple of questions by clicking on the **'OK'** buttons, A screen will then appear with an **'Install Icon'**, click it and allow the install program to choose its own folders.

***NOTE:*** *If you determined previously that the* ***MQSeries Client*** *is already installed on your machine, then, skip the following install procedure.*

Installing the **'MQSeries Client'** is a little more complicated but not much. All of the files are 'zip' files, created by IBM and distributed by us for your convenience. The 'zip' file containing the install files for the **'MQSeries client'** for **XP** and **Win/2000** is named **'MACPEnUS.ZIP'**. The same file for **Win/98**, and **Win/ME** is named **'MACJEnUS.ZIP'**. The same file for **Vista** is named **MQC6_WIN.ZIP**. *Check and be sure you downloaded and saved the correct file from the download center.*

**Right-Click** on the file name, and from the menu that appears select **Open With** (not Open) and from the menu that appears choose **Compressed (zipped) Folders** to open the zip file and reveal its contents.

At this point it would be a good idea to click on the **'View Menu'** and select the '**Details'** mode to get on the same page with these instructions. The files ('MACPEnUS.ZIP' and 'MACJEnUS.ZIP') contain two subfolders, one named licenses, and a second named *either* **WIN95**, *or* **WINNT** depending on which version you are installing. Open the folder beginning with **WIN** and look for the subfolder named **'setupEn'**. Open that folder. The file MQC6_WIN.ZIP contains a folder named Windows. Open that folder. At this point whatever zip file you are working with should be showing the contents of a folder which contains **SETUP.EXE**.

**NOTE:**
*Depending on your windows setup, you may or may not see the suffix* ***'.EXE'****. If you do not see it, you will see several files, all named* ***Setup****. If your file listing shows the* ***'Type'*** *of file, select the one with a Type of* ***'Application'****. If you still can't determine which is the proper file to execute, then do the following:*

- Click on '**Tools**' on the top bar.
- Select '**Folder Options'**
- Select the **'View'** Tab
- In the big box that opens, locate **'Hide extensions for known file types '**
- ***UN-Check*** the box next to it, to turn off the option *(you will now see the 'file extensions' on all files).*
- Click on the **'Apply'** button and then the **'OK'** button
- Click on the '**View'** Menu and select **'Refresh'**
- The **'.exe'** suffix should now be visible.

Double click on the '**SETUP.EXE**' file to begin the install of the *MQSeries Client*. Allow the install procedure to select its own folders, etc. Respond to any questions affirmatively(Yes or OK). If it asks any questions about what to install, select only the **'client'**. (You do not need the Development Environment, etc.)

At the end of the install procedure you will need to **'re-start'** your machine. ***If it doesn't ask, reboot your machine anyway.***

**At this point you have installed DB2000V3 and the MQSeries Client, and its time to configure DB2000.**

## Configuring the Software

When you start *DB2000*, does the leftmost menu say **'File** or **Start**'? If it says 'File', then *DB2000* has picked up your previous configuration, and you can continue below with the paragraph entitled: '**Setting User Authorization Values'.**

Otherwise, click on the *DB2000* '**Start'** menu. It will respond by presenting a pull-down list to select the proper **'District'**. Click on the down arrow to open the list and reveal the available selections.

if you are doing merit marks for a ***provisional squadron*** choose **'District 90'**.

If you are doing merit marks for a **National committee** or **department** choose **'District 60'**.

*Otherwise, choose your appropriate district.*

Once you have made your selection, the system will ask you to confirm it.

Next, if '*District 60'* was not selected, the system will present another pull-down list to allow selection of the squadron within the previously selected district.

If you are doing merit marks for the **District**, select the *District* entry from the top of the list, otherwise select the appropriate squadron.

The system will ask you to confirm your choice.

Following the specification of the ***District*** or the ***Squadron*,** the menus will change and a 'File' menu will be present.

## <u>Setting User Authorization Values</u>

Click on the **'Settings'** menu and select **'User Authorization'**.

Enter **your Certificate Number** in the first box.

The ***password*** in the second box is used to authenticate *DB2000* roster retrieval and/or updating.

<u>*Enter your squadron or district's **user** or **updater** password (This is available from the Commander)*</u> in the second box depending on whether you are the roster updater or merely need to acquire the roster for your personal <u>***USPS***</u> use..

The password in the third box is used for Electronic Merit Mark submission. If you are not doing Electronic Merit Marks, this password can be omitted, otherwise enter the password supplied by your commander.

R/Cs and V/Cs using the D/60 roster to do National committee or department merit marks should use the password supplied to them by letter and should also enter this password in the second box.

## <u>Setting MQSeries parameters.</u>

If you have installed *'MQSeries'* you should set the MQ Connection Options otherwise you can Ignore them.

Click on the **'Setting'** menu and select **'MQ Connection Options'**.

If you are using any type of *permanently connected broadband connection* such as **DSL, CABLE,** or **T1,** select the **"Never Hang Up"** option. Otherwise **dial** users should select the **"Hang Up Only If Connection Made By DB2000"** option. The **Timeout** setting in all cases can remain at **180 seconds.**

## <u>Acquiring a Roster File From Headquarters</u>

If, when you click on the **Roster Button**, the roster is empty, or outdated, you will need to acquire a new roster from HQ otherwise you can bypass this step.

Click on the **Import** menu. If the **Download** option is available meaning *DB2000* recognizes that the *MQSeries Client* has been installed, select that option and continue with ***"Acquiring a Roster by MQSeries"*** below. If the **Download** option is *grayed* out, select the **"Request Roster from Website"** option and continue with **"Acquiring a Roster by Email"** below.

## Acquiring a Roster by MQSeries

When you select **Download** from the **Import** menu, a very small window will open in the lower left corner of the screen. This window will provide continuing status as the download process proceeds. Normally, it will move from **Initialize**, to **Connecting**, to **User Rights**, to **DL Roster**, to **DL Modules**, to **DL Jobs**, and finally to **Finished**.

NOTE:

There are generally 4 errors that can occur in this process.

1. The system says that the MQ.DLL can't be found. What this really means is that the MQSeries Client install has either not finished, or completed unsuccessfully. The first thing to do is to reboot and see if this error persists following a reboot. If it does, go to the section at the end of this document entitled "Problems With the MQSeries Client Install" below.

2. DB2000 reports an error 2059. This error means that MQSeries can't communicate with the network. In 99.9% of cases, this is caused by DB2000 being prevented from reaching the internet by either a firewall or a security program such as Norton or McAffee. You will need to determine what program is stopping the TCP/IP communication and configure it to allow DB2000V3 to communicate on port 1414.

3. The small MQSeries window in the lower left never gets past the state of "Connecting" and times out after 180 seconds. In this case, the server at HQ may be down. While this is not common, it does occur from time to time. If you encounter this problem, send a notification email to kestersonk@usps.org

4. DB2000 reports a password error. This means that the password you supplied back in the section entitled **Setting User Authorization Values** is incorrect. Go back and check it. Make sure that you enter it in all **UPPERCASE** letters.

## Acquiring a Roster by Email

If you are unable to use *MQSeries*, you must rely on Email to request and receive rosters. It is a two step process.

The first step is to request the roster. Click on the **Import** menu and select '**Request Roster from Website'.** If everything is properly configured, *DB2000* will open your internet browser, and send all of the necessary parameter values to a page on the USPS web server. If everything works properly, you will see the page in your browser with the message **Request Submitted OK** at the bottom. If this is the case, simply close the browser and wait for the roster to arrive attached to an email.

If there is some other message at the bottom, respond appropriately.

If for some reason DB2000 was unable to open your browser or submit the request, go to the following URL and supply the four values manually.

http://www.usps.org/national/itcom/roster/submit_request.php3

The second step is detaching the roster from the email and saving it in the **C:\DOWNLOADS** folder.

The attachment is usually named **SQD???.EX_** , where the question marks represent your squadron or district code. When you receive the email from headquarters with the roster file attached you will need to save the attached file in the **C:\downloads** folder. Do this by right clicking on whatever your browser uses to represent the attachment. It is usually an icon, but may be a link. Right-clicking presents a context sensitive menu. Select the **Save As** or **Save Target As** and use the resulting dialog to navigate to the **C:\DOWNLOADS** folder.

When **C:\DOWNLOADS** is in the top location field, click on the Save or OK button to save the attachment.

## Importing an Email Roster File

Select the **Import** menu and select **Update with Email Roster File**. This will open a **blue dialog window** with a bunch of check boxes and a **Start** button on the lower left. ***Make sure that all the check boxes are checked*** and then click on the **Start** button.

That will open a *Windows* **Open** dialog. At the top of this dialog you will see a white box labeled **Look In**: *click on the button with the down arrowhead* located on the right end of the **Look In** box.

This will open a pull down list of drives and folders. Scroll up to the top if necessary and select the entry which refers to **Local Disk (C:)**. The large white box in the center will then show all of the folders located under the root of your **Local Disk C**: Scan down and double-click on the **DOWNLOADS** folder in this list. At this point you should see the file you detached from the Email and saved in this folder. *Click on its name to select it* and then click on the **Open** button on the bottom right of the dialog. If you do not see the file's name in the large white box, then you have done some previous step wrong and will need to go back to the second step of the section entitled **Acquiring a Roster by Email** and redo it correctly.

Once you succeed in selecting the saved file and clicking on the **Open** button in DB2000, DB2000 will return to the blue dialog and begin importing the roster file.

During the importing process, DB2000 will advise you of any wrong situations it encounters in the roster file. For the most part these will relate to the record on the roster file being older than the record in your database. You can elect to skip importing any record or all records like this.

When the import is finished, DB2000 will, if the situation occurs, provide a list of records on the database which are no longer in the roster. These are records of members who didn't renew, transferred, or died. You are given the option of removing any or all of these records from your database, or tagging any or all of them for later identification purposes. When you are done with this process, click on the **Finish** button to return to the main screen.

## Processing Merit Marks

## Preparing the MM Grid

On the **Main** splash screen, there is a row of buttons; **click** on the one labeled **MM,** at the far right of the **DB2000 toolbar**. This will open the **Merit Mark** application.

If you are doing merit marks for a national committee or department click on the **Change S O** menu and select the name of the submitting officer. Also select the Submitting Department and Committee. **Do Not** select "Dept R/Cs and Other…" unless you are doing the department V/C's recommendations of his R/Cs.

The **MM** application must be loaded with the member's data. If this is the first time to use the application and you do not have access to last years MM data file, then click the **'ADD ALL'** button at the top. This will add all of your current members to the grid. Do not delete any members at this time since it acts as a reminder and possibly prevents a Merit Mark oversight.

If you did the merit marks last year then you have a ***<u>BIG</u>*** head start on this year since the data remains and many people will still be doing the same or similar work.

Likewise if your predecessor provided you with an '**MM???.DAT**' file *(**???** Is the squadron or district ID)* of last year's submissions, place it in a folder or you may copy it directly from the source if it is a floppy or memory stick.

You can now **Import** that file by clicking on the **MM** application's **File** menu and selecting '**Import MM File'.** A menu will appear, **'Import Merit Mark'.** Use the default button setting, and click **'OK',** then use the second dialog to locate where you saved the '**MM???.DAT'** file. Once you have located and selected it, click on the '**Open'** button to import the previous file.

Next, click on the **'Add All'** button to add new members and those that did not get recommended last year. (You can also add members one at a time by selecting their name and clicking '**Add')**

At this point, select '**Change Status'** on the top tool bar and choose from the menu **'Mark All as No Recommendation'**. You now have the grid ready to add and edit the new recommendations.

**NOTE:**
***You cannot edit the name or certificate number***. That is taken from the National database. If you find that you must add a ***member*** to the database, use the **'Add Affiliate'** button on the main **'Roster'** screen and supply the necessary fields. (*Type of affiliation, Last name, First Name, Certificate Number, District, Squadron, Rank and Grade).*

*Be extremely careful with the name and certificate number*. They must match headquarters records perfectly, or the submission will be rejected in the final processing step at headquarters.

## <u>Adding Credit for Work Done</u>

## <u>Giving Credit For Course Instruction Or Assistance</u>

The **Merit Mark** grid contains several columns, two of which are **'Course 1'** and **'Course 2',** each with three **'sub-columns' 'Name' 'Taught'** and **'Proct.'**. These are used to identify up to two courses for which the member taught class sessions and/or proctored class sessions.

You must first select the course by **Double Clicking** the **'Name'** field and then selecting the course name.

Now select the cell under either **'Taught'** and/or **'Proct.',** the cell will turn **Red** and have arrows that allow you to add or subtract sessions. Hit **'Enter'** after you have entered the numbers.

*Example: If the member **presented** the material at ten sessions and **assisted** at four others, then he would get credit for '10' and '4' in the appropriate columns. The numbers refer to sessions taught or proctored, not entire courses taught/proctored*

## Giving Credit For Other Work

The **'Valuable Service Performed'** field is for giving credit for non-course related activities and cannot exceed **438** characters in length. **Double click** the cell, add the information and then hit **enter** or **double click.**

Write a concise description of work done along with the hours involved. Entries such as "Served as Auditor", or "Member of Executive Committee" are insufficient and do not describe what was done, or how much effort and time was expended.

## Submitting the Merit Mark Report

When you have completed all of the merit mark data entry, it is time to clean up the report prior to submission or review.

**Click** on the **'Change Status'** menu and select **'Remove All No Data'**. This will remove all members from the grid that had no entries for work done…

Next, **Click** on the **'Change Status'** menu again and select **'Mark All No Recommendation For Submittal'.** This will change the **'Status'** field to **'Submit'.**

At the top right corner of the MM grid is a **'Review'** button in a box labeled **'Print / Submit'**. This button grants entry to the next part of the merit mark process.

First, you should review the **'Cover Sheet'** to make sure that the proper person is identified as the Commander or submitting officer. If the 'Commander' is not the one listed, then the **'Roster'** database needs to be corrected so that the **'SQ Rank'** field of the current commander says **'Cdr'** and the **'SQ Rank'** field of the person shown as **'Commander'** is corrected to some other rank, probably **P/C**. Once those changes are made, the cover sheet will show the correct commander.

Under **'Page Select'** The first four buttons, **'Cover', 'Next',' Previous'** and **'Last'**, are used to page through the report. The **'Print All'** button is used to print a complete ***many page*** submission. The **'Print Page'** button will print the page showing in the preview window.

Since all submissions should now be done electronically, the print facility is simply to create a copy of your submission for your records. You can also do this by using the **'File'** menu of the 'Merit Mark' application to **'Save MM File'** which will create a time stamped file of the submission.

The records which are passed through to the **'Print/ Review'** process are determined by two things:
1) The value in the **'Submission Status'** column in the MM grid,
and
2) The selected radial button in the **'Type of Submittal'** box on the **Print Submittal** dialog.

If the selected radial button is **'Original',** then the records in the **'Submission Status'** column containing **'Submit'** will be shown.

***<u>You can only make one 'Original' submission</u>*****.** The system will prevent you from submitting more than one **'Original'** submission.

When you receive an email from the Merit Mark system conveying the results of the Area Monitor's review, it will contain an attachment having a name in the form XNNNNNN.TXT where the XNNN… name is the certificate number of the submitting officer. Save this file on your machine and use the Merit Marks File menu to select "Submission Status Update". Use the resulting file location dialog to navigate to where you saved the XNNNNNN.TXT file and select the file name and click on the Open button. This process will automatically change the submission status cells to either **Accepted** or **Rejected** as appropriate.

If some of your recommendations are **'Rejected'** by the area monitor and you want to **'Resubmit'** some or all of them, **double click** on the **'Submission Status'** cell of the record(s) to be **resubmitted** and change the status to **'Resubmit'**. After providing additional data supporting these recommendations, go back to the **'Print Submittal'** dialog, select the **'Resubmission'** radial button and only those records will appear.

If after submitting your original recommendations, you realize that you omitted one or more members from the submission, add those members to the grid, enter the recommendations, **double click** on the appropriate **'Submission Status'** cell(s) and change **'No Recommendation'** to **'Supplementary'**. Then go back to the **'Print Submittal'** dialog and choose the **'Supplementary'** radial button.

When you are prepared to submit your merit marks for processing, click on the **'Review'** button to open the **'Print Submittal'** Dialog. In **the 'Output Options',** select **'Send Draft To:'** or **'Submit via Web'**.

**'Send Draft To:'** will send an HTML file of your submission to someone whose email address you will provide. This function is designed to facilitate communications between a merit mark chairman and a commander, separated geographically.

**Do not send this draft to your area monitor as this is done outside of the 'Electronic Merit Mark' system and the area monitors have no way of processing it electronically.**

**'Submit via Web'** will send your submission to the appropriate area monitor. *It does not send a file, nor use email*.

Both of these buttons behave in similar ways. They both will open your browser and send a message to a remote server. The server in turn will respond with a page of instructions requiring entering/verifying an email address and navigating to and selecting a file.

The file will be named **'C:\Program Files\DB2000V3/???_MMsubmit.dat'** *(??? Is squadron or district ID.)*

After submission, the EMM system via various emails will keep the submitter apprised of the status of each submission as they move through the EMM process.

# Problems with the MQ Series Client Install

If you have attempted the corrective actions mentioned previously in this document and are still getting a message indicating that the 'MQ.DLL' cannot be located do the following: Click on the 'Start' button on the lower left of your main desktop screen, then 'Select Run'... Type in CMD and click OK

This will open a DOS session window Type in 'SET' and press the Enter key. Look for the PATH= statement and determine whether the C:\Program Files\MQSeries Client\bin folder has been added to the path statement. If it has, verify that the folder actually exists on your system and contains approximately 40-45 files mostly DLLs. If not the install failed and will need to be uninstalled and reinstalled.. If the folder and it contents do exist but the path statement doesn't reference it, you will need to either uninstall the MQSeries Client and reinstall it or you will need to add the path to the folder to the environmental variable Path= manually. To uninstall the MQSeries Client use the Control Panel Add/Remove Programs applet and remove any software in the list named similar to IBM MQSeries or IBM WebSphere MQ.
Then refer back in this document to the section on Installing the MQSeries Client.