

Several times I have been asked to be the person who keeps track of the merit badge counselors for a district. While there is software written for tracking troops, none was written for this function. Since this is a database function, I chose Microsoft Access for this task. It has all of the features needed to easily implement such a database.

Someone will ask, so I will answer here. Why did you do this in Access 97? Good question. First, I wrote the first portions of this database in 1997! Access was cheaply available. I am a Database Administrator and as such, chose the tool that would do the job. I have not updated it because I wanted to distribute it. By distributing it as an Access 97 database, anyone with a later version just opens the database once and saves it. It is then updated to the latest release. There are still people out there with Access 97 that can't open anything newer.

2009 update. Well, after several years, the above is no longer completely correct. Thanks to Microsoft, you cannot upgrade all the way from Access 97 to Access 2003 in one shot. This zip file contains a version upgraded piecemeal over time and solves that problem. I will leave the old version available for those whose machines still use the older software.

This time around, the District Executive was receptive to one idea that I had, and distribution of the list has become a simple matter. The district list is written by report from this system in Acrobat format. The file is then posted upon the district web page, under the council website. This makes the list available 24 x 7 for everyone in the district. An important note to make this work is that the cover page MUST contain a "last updated" date.

Basic reports and queries are developed and included. Three forms are already included for entering data. These are fine for entering raw data, but you can do a mass entry using the import facility built into Access. You will have to build comma separated files to that purpose.

The legal stuff. I am releasing this code as freeware. This means that you are free to use it, free to pass it on, and even free to modify it, with one exception. In the database properties section, my name and e-mail address appear, along with some other identifying information. You are not allowed to modify the database properties section. If you have recommendations, and/or updates that might be useful, send them along and I might add them.

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This portion of the document is an explanation of the underlying structure of the design, and then how to use it. The design uses six tables, which I will describe one at a time. The first table is the Contact_list table. This is a newer portion of the design. I found myself needing to send e-mail updates to various people, and decided to consolidate that function into a single short table. There are no reports on this table, since I normally just display it when I need an e-mail address. This is to give me a contact person with each troop. I also have the district executive in this list. The entries in this list may or may not actually be counselors.

Contact_list

Column	Datatype	Definition
Troop	DBL PREC	Troop number of contact
First_name	CHAR(32)	First name of contact
Last_name	CHAR(32)	Last name of contact
e_mail_address	CHAR(50)	e-mail address of contact
Primary_contact	Yes/No	For multiple contacts is this the primary?

The second table is populated for you with the latest information that I have as of the release of this database. This is the list of all merit badges, both current, and what information I have on old ones. It is imperative that this table is kept up to date. If a merit badge is removed from the national list, mark it as no longer current. This will remove the merit badge from the reports that you will be posting, but keeps the relationships for historical purposes. The last year phamplet revised, Last Year Req Revised, and required fields are just informational at this time. Dummy_field is just that, a dummy field used to make a query/report work. Ignore it. Comments are a memo field for you to put in whatever notes you like and required flag is populated with asterisks in the required merit badge columns so that the asterisks will appear next to those merit badges in the council report. (Last updated October 2008)

MeritBadges

Column	Datatype	Definition
Merit Name	CHAR(50)	Merit Badge Name
Last Year Revised	CHAR(4)	Last year phamplet revised
Last Year Req Revised	CHAR(4)	Last year that merit badge requirements were revised
Required	CHAR(2)	(R)equired, (N)onrequired and (O)ptional (choose 1 from each category) merit badges
Current	Yes/No	Is this a current merit badge?
Dummy_field	Yes/No	dummy to make one query/report work - no data
Comments	Memo	Comments about changes
Required_flag	Text	Asterisk on requireds for Council report

This next table ought to be easy to understand. This is what all the information about individual counselors is stored. Unlike some other systems, you only enter this information ONCE for each counselor. After filling in this table, you may wish to copy it to the Counselors_hist table. This is a backup copy that allows you to recover from "oops" deletion of counselors. The Counselors_hist table has exactly the same structure as the Counselors table.

Do not enter a list of merit badges in the note field. The home district field will default to "Thunderbird", which is the district I am currently working with. You can change that in the table definition to whatever district name you are working with. Having this field in the database allows you to track more than one district at a time. (If you let someone talk you into that, good luck.) (Also change the default in the counselors_hist table). (Note: There are a couple of places where default values are built into queries and tables. They are currently set for the district I am working in right now. Feel free to change them for your situation.)

The restricted counselor field is **IMPORTANT**. This field determines if a counselor is willing to work within a single troop or with all troops. A value of **NO** in this field will keep the counselor from showing up in the district report listing the counselor's address and phone number. The separate report for each individual troop will list **all** counselors.

Last validation date is to support some national requirements. All counselors are supposed to be verified every year. This date is used by a query to generate a list of counselors that need to be verified. The active field can be used to do mass deletes with a query that is supplied.

***** Due to the design of the database, when a counselor record is deleted, all references to which merit badges were taught are also deleted. This makes cleanup very simple, but is not what some people expect.

Counselors

Column	Datatype	Definition
LastName	CHAR(32)	Counselor's Last Name
FirstName	CHAR(32)	Counselor's First Name
Suffix	CHAR(5)	Counselor's suffix (Jr, Sr etc.)
Address	CHAR(32)	Counselor's Address
City	CHAR(32)	Counselor's City
State	CHAR(2)	Counselor's State
Zip	CHAR(9)	Counselor's Zip code
WorkPhone	CHAR(10)	Counselor's Work Phone Number
Extension	CHAR(6)	Counselor's Work Phone Extension
HomePhone	CHAR(10)	Counselor's Home Phone Number
MobilePhone	CHAR(10)	Counselor's Cell Phone Number or Beeper number
FaxPhone	CHAR(10)	Counselor's Fax Phone Number
EmailName	CHAR(50)	Counselor's E-mail address
Registration Number	CHAR(10)	Registration number, if known
Occupation	CHAR(50)	Counselor's Occupation
Last validation date	DATETIME	Last date counselor was contacted to verify place on list
Over 21	Yes/No	Is counselor over 21? (used to determine insurance risks for drivers)
Home District	CHAR(20)	Counselor's home district name
Home Troop	DBL PREC	Counselor's home troop
Filed form yet?	Yes/No	temp field for district setup
Restricted Counselor	Yes/No	Is counselor willing to work outside home troop?
Active	Yes/No	Is this counselor still active?
Note	Memo	Notes on this counselor

The CounselorMerit table is the heart of the system. This is where you link merit badge counselors to the merit badges they teach. You must enter the merit badge counselor before these records can be added (and of course, the merit badges themselves must be entered, but I supplied you with those). Note that Access will prevent you from adding a record to this table unless the matching records are already in place in the other two tables. This includes matching spelling. I recommend that you exclusively use the forms to add data to this table, as it makes this an easy issue to deal with. Individual merit badges taught by counselors are added and subtracted here.

After filling in this table, you may wish to copy it to the CounselorMerit_hist table. This is a backup copy that allows you to recover from “oops” deletion of CounselorMerits. The CounselorMerit_hist table has exactly the same structure as the CounselorMerit table.

CounselorMerit

Column	Datatype	Definition
LastName	CHAR(32)	Counselor's Last Name
FirstName	CHAR(32)	Counselor's First Name
Merit Name	CHAR(50)	Merit Badge Name

FIRST TIME SETUP

First, make a backup copy of the database and put that away for safekeeping.

1. Open the database. Access should ask you (unless you are using Access 97) if you want to convert the database. Answer yes and follow the directions.
2. Open the newly converted database. Choose Tables and then highlight the Counselors Table. Choose the Design view of the table. Find the column labeled "District" and highlight it. In the default section at the bottom of the window, find the word "Thunderbird" and replace it with the name of your District. Close and save this table.
3. Repeat Step 2 for the Counselors_Hist table.
4. Look to the Queries tab or button. There are 28 queries here. Some of them you will never use and some are only here to make report work.
5. Expired counselors has a hard coded date in it. When you want to use this query, you have to open it in design and set the date for using it.
6. First aid builds a query for the merit badge hard coded in it. This is useful when you want to gather all the information on a merit badge to e-mail to someone. You have to put in the merit badge name under design to make this one work.
7. Look to the Reports tab or button. Only 1 report requires setup. This is the Council Report. Highlight this report and then open it in design mode. The top part is the report header. Highlight the word THUNDERBIRD and replace it with your District's name. Repeat the highlighting and replacement to change the name of the Advancement chairman from my name, the two phone numbers from my home and work phone numbers and finally my e-mail address.
8. You are now ready to load the data tables. If you are pulling data from another system, then I recommend comma separated values and loading the table. Remember to load the counselors table before the counselor merit table!