

Beyond the Basics



A COMPUTERIZED SKILLSBANK: How Do You Build One?

By Patrick Saccomandi

If you have a dBASE III software package or its equivalent, how do you use it so that it can handle the registration of volunteers and the entry of requests for volunteers? How do you get it to match one to the other and to handle your requirements for day-to-management reports and summaries of statistical information?

For the past 10 years, I have thought about these questions as I have consulted with Volunteer Centers and programs throughout the country. I'm putting down my conclusions here. Described below are the data fields I would use, what I would want the matching process to look like, how I would construct skill/interest taxonomies, how I would deal with volunteer preferences for clients, time availabilities, geographic locales, and what kind of printouts and screen displays I would like to see.

It is my "ideal system." It handles all I can think of that I might want to do.

A. Volunteer Registrant Information

As you can see on the side panel of data fields for volunteer registration, "I want it

Patrick Saccomandi, VOLUNTEER's computer consultant, is a leading expert on computers and database management applications for community-based, volunteer organizations. In 1979-80, he consulted for VOLUNTEER's Skillsbank Project, funded by the Mott Foundation, which developed the popular Skillsbank Manual (out of print). Now that information is available in a new software package called Resource Match, upon which this article is based.

all." I want the address fields to cover all the possibilities—corporate volunteers with complex business addresses to the simple at-home three-line address of the typical volunteer. I want Mr/Ms/Dr etc. for the name so that I can later merge information from this file to a word processed letter and have personalized inside addresses and salutations. The option to record the registrant's occupation, employ-

er, sex and birthyear also needs to be available.

For the other background and preference information (education, ethnicity, transportation requirements, time availability, geographic locale, previous volunteer experience and client group preference), I want the ability to set my own codes according to the needs of my own agency.

VOLUNTEER REGISTRANT INFORMATION

Registrant ID#	Vol Type (Corp., Court Ref., etc.)
Last Name	Street Address-Line #1
First Name	Street Address-Line #2
Middle Initial	City
Prefix (Mr/Ms/Dr./etc.)	State
Home Phone	Zip
Business Phone	Business Address-Line #1
Best Time to Call	Business Address-Line #2
Birthyear	Business City
Male/Female	Business State
Ethnicity	Business Zip
Education Code (multi-value)	Occupation
Ed Year (for each Ed Code)	Employer Code
Transportation Ability	Medical/Physical Limitations
Time of Day Availability	Geo Code (can include clusters)
Available Start Date	Court Name (for court referrals)
Available End Date Court Officer (for court referrals)	Corporate Team Code/Name
Total Vol Hours Wanted/Required	Previous Vol Experience Code
Client Group Pref. (multi-value)	Termination Date from Roster
Skill/Material Codes (multi-value)	Termination Code
Method of Involvement (per skill)	Comments (unlimited text)
Level of Proficiency (per skill)	
PLUS four unnamed fields whose purposes are specified by the user	

Knowing what I do about the power of computers to handle these code designations, I would look for the ability to create "table look-ups" for these codes. A look-up file is composed of two elements, the code and a description for it (such as the number "3" for a client preference code and "Handicapped/Disabled" for the description of it). This look-up feature also means that I don't have to type the text descriptions, as the computer automatically prints out the text instead of the code. A table file is something that can also be changed whenever I want to add, delete or alter a code.

The most important use of these table look-up files will be for the skill and interest taxonomies. My list of skills codes may be 100 categories or 1,000 categories long. The software would need to be able to deal with either. I would also want the software to handle how the registrant wants each skill applied (as a board member, in direct service to an individual, for technical assistance to an agency, etc.), and the level of proficiency for each of these roles.

I ask all of this because I know, as a volunteer administrator, I will be asked by a requestor for a volunteer who is an accountant who wants to be on a board and who has a high level of experience as a board member in that position (or some such set of criteria).

And, to wrap it up, I would want a "comments" field where I can write up to a paragraph of text, because court referred volunteers are now such a large part of volunteerism, I want the fields to handle their needs. And (how about this!) I would want this whole registrant data file to be able to handle material donations and other resources that I might want to match to requests.

B. Request for Volunteer/Material Information

The request data fields, in large part, need to mirror the registrant data fields, as can be seen by the side panel listing of fields. I would want one structural difference—divide the agency information into two files, with the agency background information in one and the specific job requests in another.

This is desirable because any one agency will likely have several requests. I would thus be able to enter the agency background information only one time, and have the computer automatically join it to each of the job requests for that agency, thus saving me a lot of duplicate entry.

REQUESTOR BACKGROUND FILE INFORMATION

Requestor ID Number	Type (eg, United Way)
Requestor (Agency Name)	Origination Date
Department	Contact Name
Street Address-Line #1	Contact Title
Street Address-Line #2	Phone
City	Affiliation Status
State	Fee Payment
Zip	Fee Payment Date
Description of Services	Termination Date
Last Update	Termination Code
Comments (Open text)	

C. Matching Volunteers to Requests

Now, I want this "ideal" system to be able to match volunteers to requests, requests to volunteers, or simply give me the volunteers or requestors that meet criteria I may set myself. Naturally, I want this matching process to be both easy to use, yet flexible enough to handle very complex sets of criteria. I would want it to have these characteristics:

■ **Menu driven:** For most operations, I want the computer to lay out choices that can be executed by a simple key stroke.

■ **Set-up of match criteria:** For volunteer-to-requestor matches, for example, the computer should display the volunteer's skills and preferences on the screen (so that I do not have to look them up and enter them myself). I should then be able to modify these criteria if I think that will more likely result in finding suitable positions for the volunteer. A similar screen set-up would be used for requestor-to-volunteer matches.

■ **Winnow on screen:** This means that once the computer has found the volunteer positions or volunteers that match my criteria, I will have the ability to go through each one individually on the screen and select the ones I want to match up. In this way, if 20 volunteer positions meet the initial selection criteria, I can winnow through them until the best three are identified for referral.

■ **Standard query language option:** This means that I can choose NOT to use the menu set-up and be able to directly command the computer to display volunteers or positions that meet my criteria. The typical query language would look something like this: "SELECT VOLUNTEERS WITH SKILL EQUAL TO H104 AND AGE GREATER THAN 45 AND SORT BY ZIP."

I want this ability because, as my skills

with the computer grow, I will often be able to make the computer perform faster by directly working with its own language than by going through the one-two-three steps of the menu process.

■ **Direct access to standard reports and mail-merge documents:** I want the system to come with standard report formats (e.g., mailing labels, follow-up letters to requestors, etc.) that I can immediately use, once I've made my volunteer or requestor selections.

■ **Save to list/use list options:** For any selection of volunteers or requests, I want the ability to save this list so that I can go back to it later (and not have to re-select them). This will save a lot of time.

D. Tracking of Matches

I will want the computer to help organize the follow-up process. Once referrals and placements are made, there is the need to check on them to see if all is OK, to tally hours served by the volunteers, to remind requestors to report back on the progress of a referral and the like. At the minimum, the system should be able to record and track for each volunteer and requestor:

- Appointment dates
- Referral dates
- Placement dates
- Follow-up dates (tickler dates)
- Reasons for the follow-up (a text field)
- Hours of the volunteer
- Dollar equivalency of the volunteer's work
- A code giving my assessment of the status of the referral/placement
- Termination date
- Termination reason

I would then want the computer system to have the following features:

■ **Menu driven:** For quickly getting into the right file to update the activity log and to make use of report and letter formats used in the follow-ups (e.g., a computer-

I want this "ideal" system to match volunteers to requests, requests to volunteers, or simply give me the volunteers or requestors that meet criteria I may set myself.

generated letter that goes to a requestor once a volunteer has been referred to him/her(it).

■ **Automatic posting among files:** For any follow-up activity, only one screen entry should be needed to update all related volunteer and requestor records (e.g., if a volunteer terminates from a placement, that change will be made to both the volunteer's file and the requestor's file).

■ **Automatic "flagging" of important performance measures and needs for action.** This means that I want the computer to be able to compare the number of volunteers a requestor wants with the number that has been placed and to provide listings of those that still need more referrals. Similarly, I want it to be able to quickly provide listings of all those follow-up calls that need to be made this week (or whatever time period I select). In this way, I and my staff will have much of our tasks organized for action.

E. Report Generation

Here again, I want ease-of-use and power. I want the system to be able to produce printed and screen reports through both:

■ Standard report and letter formats accessed by menu options

■ Custom formats I can design myself (specifying the fields to be reported, their format on the page and their sorting order (alphabetically, by zip code, etc.))

For the standard report formats, I want to be able to specify the selection criteria for the records, the report title, date and starting page number, the sorting order, and its output to printer or screen. A list of standard report formats I would want is given below. Each should be accessible directly from the match and follow-up menus that pertain to them. They should also be usable for lists selected by the system's query language capability.

—Mailing labels

—Volunteer registrants—full file report

—Requestors—full file report

—Volunteer resources directory—organized in order of skills

—Requestor needs directory—organized in order of needs

—Volunteer follow-up call sheet—contact information, dates and follow-up comments information

—Requestor follow-up call sheet—contact information, dates and follow-up comments information

—Volunteer statistical summary—counts of key descriptive fields

—Requestor statistical summary—counts of key descriptive fields

For the "letter formats," the system should provide a set-up screen that enables the operator to type in the body of text for the letter and to select the data fields to be used and their placement in the document (e.g., the address fields for volunteers for the inside address of the letter).

The system's on-screen text-editing capabilities should be comparable to that of popular word processors. A letter, therefore, can be customized for virtually any purpose (referral and appointment follow-ups, thanks you's, birthday greetings, re-

mindings to requestors, etc.) and produced for any selected list of volunteers or requestors.

F. Performance Requirements

Obviously, I want this system to run fast and smooth. In order to assure this I would like it to include:

■ **Indexing key fields for "eye-blink" search times:** Names of volunteers and requestors, skill codes and geography cross-referenced. The user can choose to index other fields as needed.

■ **Automatic duplicate checking:** When a new volunteer or requestor is entered, the system very quickly displays the names and addresses of records that may be duplicates.

■ **Variable length field structure:** Fields expand to the size needed for an entry. If a field is not used for a record, no storage space is taken up on the disk.

■ **Multi-valued field items:** This means that a volunteer's record, for example, can hold one skill or 20 (or whatever). A requestor can identify two job positions or ten, etc.

■ **User entered "table files":** As I already described, these files exist for skill categories, geographic zones, time availability periods and the various codes listed in the data base. They permit the user to self-define, for example, skill categories and their descriptions. The system can thus display the full description of a skill when only its code is entered into the volunteer or requestor file.

These tables also permit the "cluster-

JOB DESCRIPTION FILE INFORMATION

Requestor ID#

Request Date

Program Area

Work Address-Line #1

Work Address-Line #2

City

State

Zip Code

Number of Volunteers Needed

Client Groups Served

Training Provided

Benefits Provided

Geographic Code

Transportation Needed

Education Required

PLUS four unnamed fields whose purposes are specified by the user

Job ID#

Job Title

Job Duties

Contact Person

Contact Phone Number

Start Date

End Date

Time of Day for Work

Total Number of Hours Needed

Previous Vol Experience Required

Job Publicity Date (multi-value)

Media Used (eg, newspaper) per Date

Skills/Material Codes (multi-value)

Involvement Method (per skill)

Level of Proficiency (per skill)

ing" of geographic and time availability codes, so that a single code can represent many zip codes or times of the day and week. Initially filled with suggested data so that the system immediately is operational, modifications to them can be made through a normal update screen.

■ **Help windows:** A keystroke provides immediate insertion of help windows with instructions to using the function at-hand, and lists of geographic codes and other table file references.

■ **On-screen cursor control:** The operator can move forward and backward through a record's entry screen, page up and down through lists, repeat the data for a field from a previous entry, have data entry validated according to pattern and size (e.g., only dates can be entered in a date field), invoke defaults and make use of the many other attributes of a sophisticated editor.

G. Installation Disk, Manuals and Sample Data

Any good system should come with an installation disk that steps the operator through the initial loading of the software and file structures onto the operator's own equipment.

Manuals should be clearly written and cover all operations.

Given that this system is sophisticated, it should come with menu options to routinely handle the back-up and restoration of data and software onto tape or floppy disk media.

Also, the table files, defaults and similar supports are initially filled with recommended settings and data. This means that the system is immediately operational, needing only the registration data from the user's volunteer and requestor records.

Last, but not least, I would hope that the software also is capable of being used in a computer network.

OK, so I have high hopes. That is a lot to expect from a computer program, especially one that won't cost six months of your salary. So, to be sure that I have what I really want in a software package, I had one created to just the specifications I have listed here. It is called Resource Match and will be showcased in Orlando in June at VOLUNTEER's annual conference. It will cost \$779 for the version that runs on IBMs and IBM-compatible machines, and a scaled-down version for Apple IIs will cost \$295. One of these software packages may be for you. A descriptive flyer is available from VOLUNTEER.