

Issue Paper

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Reengineering DoD Recruiting

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THE NEED FOR EFFICIENT RECRUITING

Few would contest the success of the all-volunteer Army. Operation Desert Storm spoke volumes about its military value. Nor would many debate that much of that value stems from the high-quality soldiers who make up the force. It has not always been so, and it took years of painstaking effort following the implementation of the all-volunteer force to recruit and train today's high-quality Army.¹

The Army's recruiting program is a critical element in maintaining the quality of the force. However, recruiting is always a challenge, and several factors have coalesced to make it particularly difficult in the past few years. First, the post-Cold War military drawdown reduced the number of uniformed recruiters, and it also reduced budgets for other recruiting resources such as advertising and enlistment incentives.² These budgets are likely to remain tight for the foreseeable future.

Paradoxically, recruiting requirements are now on the upswing. This occurred because, during the post-Cold

War drawdown, the Army temporarily cut back on accessions to help bring down its force size. Now that the drawdown is completed, it must increase its recruiting goals to maintain a constant strength level. As a result, the Army's recruiting goal for 1997 called for nearly 50 percent more accessions than were obtained in 1995.

Such changes have made the recruiting climate more difficult. At the same time, the supply of recruits appears uncertain. Recruiters have frequently reported difficulty in reaching their goals in the past few years. DoD's periodic survey of male youth 16–21 years old shows that fewer American youth are interested in enlisting in the armed services (Figure 1). In addition, RAND estimates of enlistment supply predict that, without additional resources, the Army would have missed its original recruiting goals for FY97 by a substantial amount.³ The same analysis showed that more resources are required to produce a given number of recruits today than before the drawdown.

These trends suggest that counteractions are needed. In fact, DoD has already increased expenditures on various recruiting resources. However, this paper argues that structural changes are needed as well, to make the recruiting system more efficient. We propose "reengineering" the system to improve efficiency in a crucial area: use of recruiters' time.

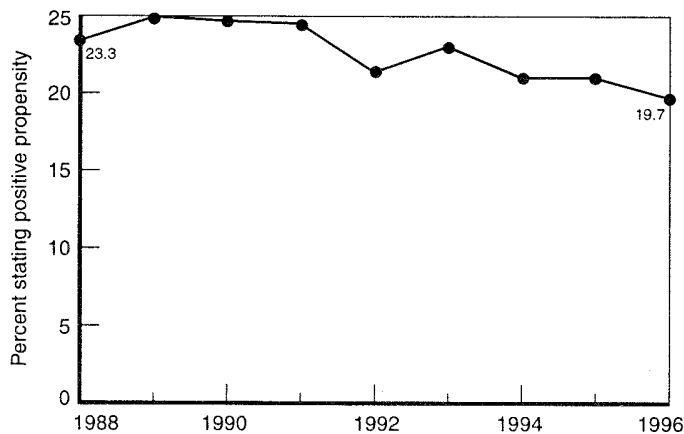
Much of the typical recruiter's time is spent on the early and difficult steps in persuading a person to enlist: using leads to make initial contact and developing the

This issue paper results from an independent study of the Army recruiting system by one of the Arroyo Center's Army fellows. The Arroyo Center is a federally funded research and development center (FFRDC) sponsored by the United States Army.

¹The proportion of incoming soldiers who met DoD criteria for high aptitude (scoring in the top 50 percent of the youth population) and educational attainment (high school diploma) jumped from 15 percent in 1980 to 66 percent in 1993 (Asch and Orvis, 1994). For evidence on the contribution of high-quality soldiers, see, for example, Winkler et al. (1992) and Orvis et al. (1992).

²For example, between 1989 and 1993 the Army's national advertising budget dropped by more than 50 percent and the number of recruiters dropped by 25 percent (Asch and Orvis, 1994).

³Orvis and Asch (1997).



SOURCE: Orvis and Asch (1997), based on DoD Youth Attitude Tracking Study surveys.

Figure 1—Propensity of Males 16–21 Years Old to Enlist in Any Service (High-quality respondents)

resulting prospects. We contend that two changes, in particular, could help the Army and other services become more efficient in this process:

- **Using commercial telemarketing** practices to generate leads from centrally produced lists of potential recruits;
- **Consolidating lead development** under a single DoD entity, thereby avoiding multiple-service redundancy in contacting prospects.

TODAY'S SYSTEM

The DoD marketing process for reaching prospective recruits includes both centralized DoD actions and independent service strategies. A key element is DoD's program to collect and consolidate lists of high school students. In 1995, for example, DoD prepared a consolidated list drawn from the American Student List (76 percent of all names); state Department of Motor Vehicles records (15 percent); and records of students who had taken the Armed Services Vocational Aptitude Battery while in high school (9 percent).

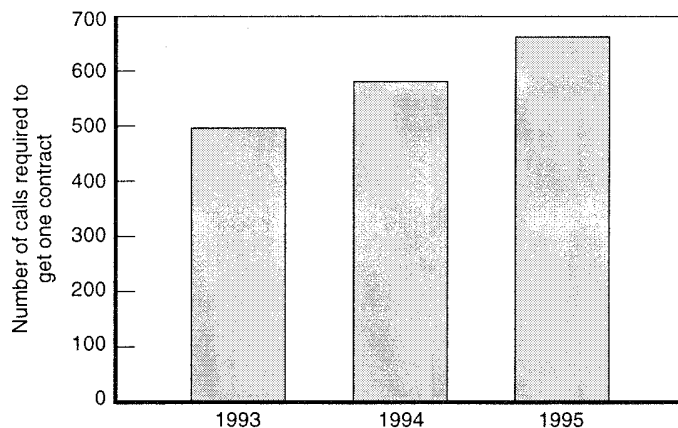
This list is a valuable recruiting tool. However, the services use it in a less-than-optimal fashion. DoD breaks down its high school list by the individual services' geographic areas and distributes it to each of them. Then the services begin a competitive process, which includes independent service direct mail to each individual on the list. At the local level, the services also try to obtain their own lists of high school students from school districts.

Then, recruiters from all four services race to be the "first to call" names on the lists they have. This is a time-consuming but critical step in the current system. For

example, a 1994 Air Force recruiter survey showed that recruiters spent 1.74 hours per day on telephone prospecting.⁴ Our observations and interviews with recruiters show that this emphasis is common for all the services. In fact, Marine Corps data for 1994 showed that more than half of all enlistment contracts originated from telephone prospecting.⁵

However, such "cold calling" is becoming more difficult. A 1994 Air Force recruiter survey reported that the average time spent on the telephone per recruiter had increased by 14 percent from 1991 to 1994.⁶ Furthermore, significantly more telephone calls are required to get one enlistment contract. For example, Marine Corps data (Figure 2) indicate that 83 more telephone calls were required on average to get an enlistment in 1994 compared with 1993. The preliminary figures for 1995 showed that even greater effort was required: 653 phone calls to enlist one recruit, which is 163 more calls than were required in 1993.

Although we do not fully understand the reasons for this increasing difficulty, several factors are probably at work. One, of course, may be the declining interest of youth in military service, and the increased difficulty in persuading them to enlist. Other factors may be associated with how Americans use their telephones. For instance, answering machine use is rising rapidly; more than 50 percent of households had answering machines in 1992, compared with 25 percent in 1988.⁷ This could make



SOURCE: Headquarters, U.S. Marine Corps Recruiting Command, April 1995.

Figure 2—Number of Telephone Calls per Contract

⁴Department of the Air Force (1994).

⁵Marine Corps Recruiting Command, Command Telephone Conversion Records, April 1995.

⁶Department of the Air Force (1994). Note, however, that not all telephone calls represent initial contacts; some of the reported effort presumably includes follow-up calls to prospects already identified.

⁷Walker Research (1992).

it easier for people to screen calls and thus avoid prospecting calls from recruiters.⁸

Other factors are also at work, increasing the workload for recruiters attempting to contact young people. For example, the number of unlisted telephones rose from 22 percent of the nation's households in 1984 to 28 percent in 1990. Often calls are not answered because "nobody's home," a situation that may be on the increase because of increasing numbers of women in the workforce, longer hours worked by employees, and more time spent on weekends away from home.⁹ Finally, cooperation cannot be taken for granted; one market research firm reports that more than 30 percent of its sample refused to participate in a survey during 1992, compared with just 15 percent in 1982.¹⁰

ADVANTAGES OF MOVING TO TELEMARKETING

Faced with declining recruiter productivity, the services have programmed additional recruiters and other resources to meet their accession requirements. However, this may not be the most efficient strategy. Instead, we argue, the Army and DoD should consider moving to commercial telemarketing methods to accomplish the very time-consuming process of lead generation—leaving to professional recruiters the subsequent steps of "selling" a prospect on military service. Telemarketing is already a large industry, with a rapid rate of growth.¹¹ Its effects are certainly felt widely: The average consumer reports receiving 25 telemarketing calls during the past year.¹² This existing large industry may offer DoD economies of scale and efficiencies that military recruiters are unable to achieve on their own.

The telemarketing industry's advances in technology and organization suggest why it could be more efficient than recruiters. Today's telemarketing workstations combine telephones, computers, display terminals, targeted databases, and professionally designed sales presentations. Predictive dialing software allows computers to call additional numbers while operators are speaking with current prospects, so that little interviewer time is wasted. Such technology controls the rate at which the computer dials phone numbers based on information such as the number of operators on the system and the average length of call for each operator. The software continuously monitors the system to ensure operators are immediately linked to calls as potential customers answer the phone.¹³

Calls that reach answering machines are automatically rescheduled for a different time the next day. This rescheduling process continues until the call is completed.

Such technology has yielded significant productivity gains, according to our informal contacts with industry managers. For example, the director of circulation for a Fortune 500 company told us that his company was able to increase the rate of calls completed per hour from 12 to 25 after implementing telemarketing, combined with increased training and employee compensation.¹⁴ Several other industry sources have provided us similar accounts.

The industry trend is toward more sophisticated and elaborate sales presentations that anticipate customer responses, especially objections. By following the directions displayed on the terminal, the operator can deliver a professionally designed sales presentation. As the caller responds to the operator's questions, the data are entered into the computer; the presentation guides the operator through the process. In addition to capturing market information and developing a customer database, this kind of system has the potential to conduct an ongoing assessment of consumer responses so that managers can adjust the product, packaging, or message.

CONSOLIDATION ACROSS SERVICES

As DoD considers such a telemarketing approach, it should also review the potential for more efficient ways to process leads through the recruiting system. We argue that the current system incorporates substantial redundancies, which could be reduced by consolidating the lead-development process across services.

To illustrate, each of the services in a geographic area recruits from the local youth population in area high schools. Every DoD recruiter is assigned at least one high school, so most high schools have recruiters from several services independently working the same school and the surrounding market. Their sales efforts are largely independent, even though in most cases their offices are physically located in the same building (the "recruiting station"). Thus, multiple service recruiters contact the same school administrators and often telephone the same prospects.

As others have pointed out, these recruiters are managed by independent recruiting structures that have little if any incentive to share market information. Figure 3, adapted from a General Accounting Office report, depicts the four services' recruiting organizations, which mirror each other's elements at each level.¹⁵ By its nature, this

⁸Tuckel and Feinberg (1991).

⁹Williams (1991).

¹⁰Walker Research (1992).

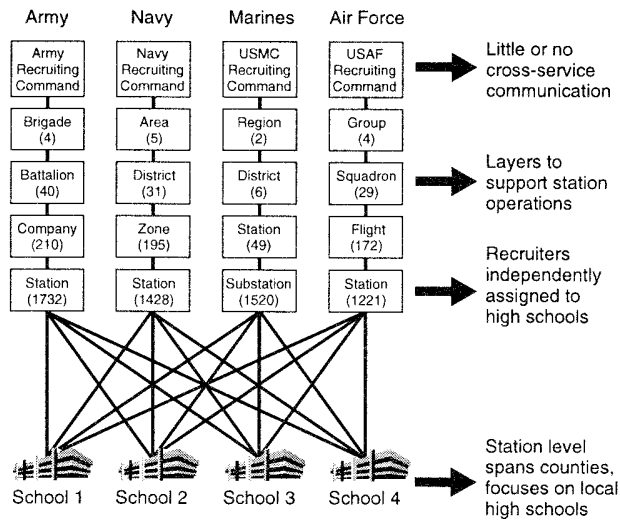
¹¹Bureau of National Affairs (1995).

¹²Walker, *Telemarketing* (1991)

¹³Eisenhart (1993).

¹⁴Confidential personal communication.

¹⁵General Accounting Office (1994).



SOURCE: General Accounting Office (1994).

Figure 3—Service Recruiting Processes

current “independent” service recruiting structure discourages cross-service operational communication and causes recruiters to duplicate each other’s efforts. It may also backfire, since recruiters from different services, using similar lists, often call the same prospect. The result is repeated intrusion upon the prospect’s time and, perhaps, alienation of potential “customers” and their parents.

At the same time that the competition among services creates this redundancy, the services are straining to sustain a minimum set of recruiting stations in the face of downsizing. During the drawdown of 1991–1995, all of the military services were forced to make tough decisions on reductions. A prime cost-cutting strategy was elimination of small or single-person recruiting stations, which were primarily located in rural areas where market potential was limited. For example, during that period the Army reduced its single-person stations from 167 to 55. Of course, this reduced the Army’s recruiting presence in rural America. However, the number of high schools and communities in the nation has not been reduced; it remains constant. We argue that by consolidating across services and offloading effort onto civilian telemarketing, DoD could free recruiters to reenter these markets where they have been absent since the drawdown. Moreover, such approaches could free recruiters from tasks that might be done more efficiently by others and allow them to focus their efforts on the job that a military person is best qualified to do: explaining military service and its opportunities to qualified prospects.

On the other hand, competition has some advantages. For example, new recruits gain information as they talk with different recruiters, and they may change their attitude toward enlistment during that process. Thus, competition among the services may yield some enlistments

that DoD might forgo under a consolidated lead-assignment system. The goal should be to retain the useful elements of the current competitive environment while realizing the benefits of consolidation.

REENGINEERING THE PROCESS

How could DoD restructure its recruiting operations to take advantage of these potential payoffs? We suggest a more cost-effective prospecting strategy that is organized along lines current in the private sector,¹⁶ applying telemarketing procedures with a new, consolidated approach to generating leads for the various services.

We envision a multistep process similar to that applied by many commercial sales organizations. Businesses typically allocate their resources to specialized groups of people to perform these steps:

- **Marketing and advertising.** First, the marketing and advertising staff creates product awareness in the marketplace.
- **Lead development.** Then the lead development staff identifies sales opportunities.
- **Sales.** Not until the leads are developed does the sales force enter the picture. When they do, they encounter a prospect who is already aware of the product and has expressed interest in it.

In contrast, DoD uses its “sales force” (the recruiters) throughout the process. When recruiting difficulties increase, DoD adds more “high-cost” recruiters (and other resources) who continue to perform most of the prospecting, when arguably that task might be taken on by telemarketers who may operate at a lower cost per unit.

We propose to shift recruiter activity to focus on “sales” (securing an enlistment contract with a young person). To handle the earlier phases of the process more efficiently, we suggest switching to a strategy of “joint lead development” that begins with Regional DoD Recruiting Telemarketing Centers (RDRTC).

Establishing Regional Telemarketing Centers

How many RDRTCs would be required to support DoD recruiting? Using telemarketing strategies, thoroughly trained but comparatively low-cost callers, and professional management, the entire telemarketing process for DoD recruiting could probably be accomplished from an office building located anywhere in the nation. In fact, many nationally known telemarketers are now located in the rural areas of the Midwest where they capitalize

¹⁶See, for example, Maginn (1993).

on efficient workers, low office building fees, and a capability to span multiple time zones conveniently.

To ensure competition and gather comparative measures of productivity, DoD could establish multiple RDRTCs in different regions. Through a competitive bidding process, it is likely that different telemarketing firms would be contracted for each of the regional RDRTCs. DoD managers would be then able to evaluate the relative productivity of each RDRTC using such measures as the total number and cost of qualified leads produced per time period.

Joint Lead Development: Contacting and Screening Customers

The search for prospects (or “customers” in a commercial context) initially focuses on telephone contact. The flow diagram in Figure 4, modeled on practices of the telemarketing industry, suggests a process for joint lead development. The first level displays the sources for leads, including targeted telemarketing from lists, inquiries and responses from national advertising (e.g., from 800 numbers), referrals by both existing prospects and other individuals, and contacts made at public forums (e.g., booth at Armed Forces Day).

The lead development process systematically screens recruiting leads. In the initial phase, the process would

use telemarketing technologies and an adaptive sales presentation to find and process individuals interested in military service. For example, the system could incorporate a comprehensive sales presentation that ensures uniformity across operators and that anticipates possible concerns or responses from the prospect.

The sales presentation would be structured to produce favorable results under a wide variety of scenarios. It might be represented, for instance, as a flow chart of possible responses from the prospect, each with a pre-approved “professional” follow-up by the operator. A computer system would guide the operator through the presentation process, while the operator enters information from the prospect’s answers. The operator would also collect information to assist in the screening process, such as graduation date from high school, medical status, and other background data.

Another function of joint lead development would be to fulfill specific requests for customer information. For example, a potential prospect may have expressed, either in the initial telemarketing contact or by mailing in a magazine coupon, a desire for information on “money for college through military service.” Direct mail would be sent to the prospect containing information on all the military college opportunities, such as the GI Bill, the Army College Fund, and the Navy College Fund. The prospect would be scheduled for a follow-up telemarketing call after a predetermined period (e.g., two weeks). The follow-up call might proceed along these lines: “Sir, we wanted to make sure you received the information you requested on college opportunities available through military service, and to see if you had any questions.” The telemarketer could then be prepared to answer generic questions, such as amount of benefits and enlistment options.

Assigning Leads

By systematically providing information about military employment opportunities, the sales presentation should explain how military service could meet the prospect’s needs. Thus, the process would be designed to produce a qualified prospect, perhaps with a stated preference of service. This is analogous to developing a lead with a stated “brand preference” in commercial applications. Once “service classified,” the prospect’s name would be provided to that service’s local recruiter for a face-to-face appointment. A key element in this reengineered process is that once the prospect indicates a service preference, a recruiter from that service enters the sales process.

Of course, there will surely be many prospects who do not have a preference among services. Furthermore, it

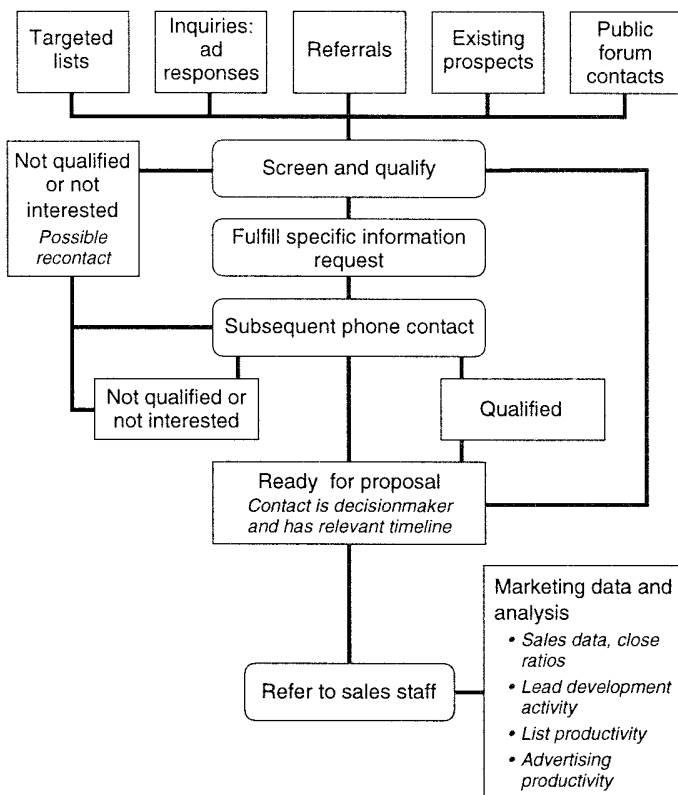


Figure 4—Joint Lead Development Flow

is likely that the stated preferences of prospects will not match the distribution of service needs. For example, we speculate that more youth would express an initial preference for the Air Force than the Army. Therefore, a key element in successful development of this system will be to develop an algorithm that can assign leads to the services, matching supply with demand and handling prospects who do not have a well-defined preference among services. For example, the strategy for working "soft leads" who do not have a service preference might be to assign them initially to a service that is behind in its recruiting objectives.

If such an assignment algorithm is in hand, the system can then allocate prospects efficiently. For example, if an individual expresses a strong preference for enlisting in the regular Army, a regular Army recruiter should close the sale. No other service or component would need to expend resources trying to contact such prospects, unless the prospect is found unqualified for the regular Army. In that case, the process would evaluate the suitability of the prospect for other military services.

This joint lead development process would also identify prospects who are interested in part-time military employment. The sales presentation could be structured to "branch" to active or reserve status, depending upon the employment preferences expressed by the prospect. Thus the process would eliminate additional calls from reserve component recruiters.

As the lead-assignment algorithm is developed, of course, it will be important to allow for the different ways in which individual youth may go about making their career decisions. For example, some youth will have well-formed preferences and can initially be assigned to just one service's recruiter. Others may express a preference but would change their minds if able to discuss it with a second service. Still others may initially be poorly matched with a particular service and might choose not to enlist at all, unless they are contacted by another service's recruiter. These uncertainties are inherent in the current process, and they would have to be recognized and dealt with as part of the new system.

Above all, it is critically important that the prospect be introduced to a recruiter who can explain the choices available for potential enlistment. Few choices in a young person's life are as important as a decision to enlist in the military. It is in DoD's and the young person's best interests to ensure that the "customer" has received answers to all questions, and that the recruiter realistically portrays what to expect if the person eventually enters the military. Therefore, the process would culminate in a face-to-face interview with a recruiter. The new process is not intend-

ed to reduce or eliminate face-to-face contacts, but rather to focus more recruiter time on these personal contacts that draw upon the recruiter's military experience and expertise. In fact, the visible presence of recruiters in high schools and public forums may be an important recruiting tool and a useful channel for disseminating information.

The automation inherent in this process would also provide a continuous information flow to help evaluate process effectiveness. As indicated at the bottom of Figure 4, the system could obtain market information and produce measures, such as the number of qualified leads per period that result in signed enlistment contracts, that could provide cost-benefit indicators for recruiting management. This would also create the possibility of trying different assignment algorithms to test alternative strategies for handling the varying preferences of individuals.

Incentive Changes

Finally, we suggest that DoD would need to change the incentive structure for this type of system. In contrast to the current incentive structure, what is needed is a system that rewards not only enlistment contracts but also "assists" that might come from another service. In hockey, for example, the leading scorer is the individual who scores the most goals and assists (passes that allow another player to score). Under this type of incentive structure, individual and team objectives are complementary; individuals have incentives to perform well both as an individual and as a member of a team. Thus, instead of rewarding recruiters only for enlistment contracts directly accredited to them, the system might also provide substantial rewards for referrals to the other members of the joint recruiting team.

THE NEED FOR A TEST

The proposed reengineering of DoD recruiting should be pursued carefully. The changes outlined above are substantial, and their implementation would require new policies and procedural changes. A test program should be developed to assess the benefits and costs of the new system of telemarketing and lead generation relative to the existing marketing approach. In addition to assessing costs in detail, such a test should evaluate several key parameters, such as prospect screening, coordination of recruiting, and information gathering.

Prospect screening. Telemarketing techniques might more efficiently identify and reach new prospects. It is hard to believe that the military calling system compares favorably with that of a telemarketing firm in simply reaching prospects.

Under the proposed system, recruiters would be freed from the burden of telephone prospecting and available for more direct contacts with interested prospects. The recruiters' comparative advantage lies in their military experience and expertise. This advantage is probably wasted on initial contacts that involve only modest amounts of information exchange. If prospects need detailed information about the military, they could be referred directly to a local recruiter. Nonetheless, some prospects might be discouraged by this referral approach, so the test should evaluate the cooperation rates of prospects under the telemarketing versus the traditional recruiter approach.

The test should explore the most effective approach to following up with prospects. An evaluation should be made for the point at which direct recruiter contact becomes cost-effective; for example, information dissemination may be handled through the telemarketing effort and face-to-face contact delayed until a prospect shows greater interest. Alternatively, the handoff of interested prospects might be done most effectively at the earliest stages of the process.

Coordination of recruiting. The current system involves several recruiters pursuing the same group of recruiting prospects. Active- and reserve-force recruiters from various service branches are asked to collect phone lists, call prospects, and ultimately follow up with interested youth. This system encourages competition among recruiters and spurs the efforts of some recruiters to outperform their rivals. Yet the system also has significant redundancy, since eight or ten recruiters are independently chasing many youth who may have no interest in the military at all. While some youth may eventually be persuaded by new information or recruiter pressure, the repeated contacts are perhaps of limited value.

The new system will integrate the lead-generation process and focus recruiter efforts on screened prospects. The intent is to match prospects with their "best" alternative in terms of their interests and military needs, thus minimizing redundant recruiter efforts. However, the specific mechanism or formula for allocating leads to service recruiters requires careful research and evaluation. While redundancy should be minimized, the lead-allocation system should be optimized to insure that it collectively meets the needs of the military and young prospects, while encouraging the work effort of military recruiters. For example, if the system emphasizes military needs only, then prospects might be directed toward a branch they are poorly matched to and unlikely to join.

The system should also be sensitive to the needs of the Selected Reserve and the interest of youth in a part-time military commitment. The current system offers few

incentives for active- and reserve-force recruiters to share prospects, but some prospects may be better suited for part-time than full-time service.

A poorly understood aspect of the recruiting process is how youth attitudes toward the military are formed and how these attitudes are altered in the recruiting process. Do youth have strong preferences for some branches or programs? How are these preferences changed as the prospect becomes better informed? Do recruits consider military branches or occupations within a branch to be close substitutes for one another? The answers to these types of questions are integral to developing a mechanism for allocating leads among the military services. If an uninformed group exhibits strong interest in a particular service and this interest persists as they gain information, then redirection efforts may be counterproductive, i.e., group members may become discouraged and not enlist at all. Alternatively, attitudes may change as youth gain more information, and multiple recruiter contacts may help some prospects find better matches. For all these reasons, the test should compare various allocation schemes, e.g., assigning leads to the one "best matched" service versus disseminating them to multiple services.

Information gathering. As part of the telemarketing process, callers could readily collect information about youth interests in the military and knowledge of military programs. Anecdotal information is currently collected by recruiters, but computer-assisted telemarketing would provide a systematic flow of information as part of the lead-generation process. This information could be used to refine and evaluate military advertising programs as well as to redefine enlistment incentive efforts.

The information gathering could also be extended beyond the immediate lead-generation objectives to include the collection of short surveys on youth attitudes. The telemarketing forum would allow the surveying of randomly drawn samples and quick-response evaluation of youth trends and attitudes. This surveying potential would not obviate the need for ongoing, detailed surveys of prospective recruits, but the new effort could provide a low-cost approach to collecting real-time data.

While we should not prejudge the success of these initiatives, the proposed recruiting reforms offer promise for reducing the costs of recruiting. The new system should be designed with flexibility—new information is captured through the recruiting process and should be used to adjust the system for further refinements. The changing military environment along with new trends in youth behavior makes it imperative that the recruiting system becomes a learning organization that evaluates new parameters quickly and adjusts resources to efficiently meet the recruiting mission.

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