

The Enlistment Bonus Experiment

The Department of Defense annually recruits and trains about 300,000 new enlistees for military service. Since the end of the draft in 1972, all of these personnel have been volunteers who chose the military over alternative possibilities such as civilian employment or education. One of the principal challenges for defense managers in recent years has been to attract these volunteers within a reasonable level of recruiting expenditures. The challenge has been especially acute for the Army, which has experienced more difficulty than the other services in recruiting persons capable of handling its increasingly sophisticated equipment.

One way in which the DoD has sought to increase the quantity and quality of Army recruits has been through paying \$5,000 cash bonuses to persons of above-average aptitude who enlist in special skill categories for four-year terms. Responding to a mandate from Congress, the DoD and the Army undertook a two-year test, from July 1982 through June 1984, to determine the enlistment effects of expanding the bonus program. The RAND Corporation assisted the DoD by designing the experiment and analyzing the data.

ISSUES AND DESIGN

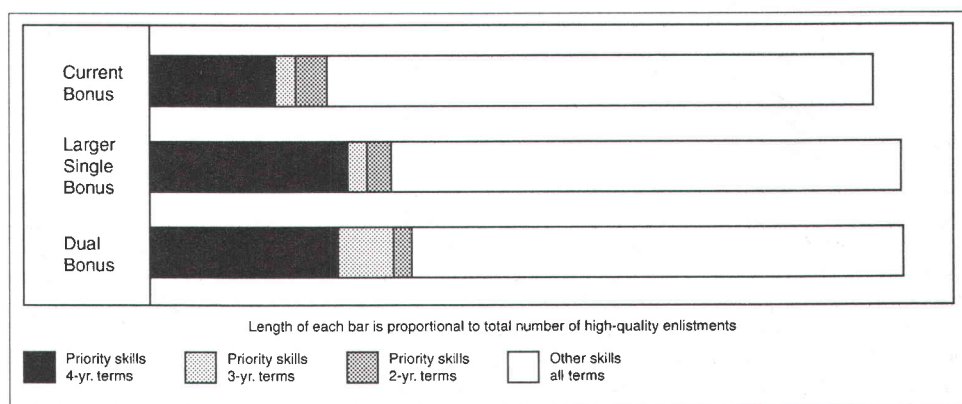
The experiment addressed three important questions about increased bonuses:

- Would they attract more high-quality recruits, i.e., high-school graduates scoring above average on the Armed Forces Qualification Test?
- Would they encourage more enlistments in the hard-to-fill critical specialties?
- Would they influence recruits to sign contracts for longer terms of service?

These questions were answered by testing three different programs offering bonuses to high-quality recruits in hard-to-fill skill categories. These programs were the current one; one offering an \$8,000 bonus for a four-year term; and one offering \$8,000 for four years or \$4,000 for three years. The programs were tested by establishing them in equivalent but dispersed sets of local areas, assigned by a randomized process with constraints to ensure balance on such factors as previous enlistment rates, civilian economic conditions, and recruiting goals.

RESULTS

As shown in the figure, the expanded bonus programs had striking effects on the number of high-quality enlistees attracted to priority skills and on the number of the latter signing up for the longer terms. The dual-bonus program, for example, resulted in 49 percent more high-quality recruits entering priority skills than did the current program. It increased the number of three-year enlistments among high-quality recruits in priority skills by 178 percent. Where an increased bonus was offered for four-year enlistments only, the number of high-quality recruits entering priority skills went up by less—37 per-



Expanding the bonus program raises the number of high-quality recruits choosing priority skills and longer terms

cent. However, the number of four-year terms among high-quality enlistments in priority skills increased by more—58 percent.

Under the expanded bonus program, high-quality recruits enlisted not only for longer terms but also in slightly greater numbers. The composite result was an increase in total man-years obligated to the Army. This worked out to 6 percent under the single-\$8,000-bonus program and 8 percent under the dual-bonus program. Of course, there are alternative means of increasing total man-years obligated, e.g., buying more advertising or paying more recruiters. Further research is required to determine which is the most cost-effective.

CONCLUSION

For achieving specialized recruiting objectives, bonuses are more flexible than options such as increases in compensation, benefits, or recruiter effort. Without altering the fundamental level or structure of military compensation, bonuses can be swiftly changed in response to critical shortfalls in particular personnel cate-

gories. **Their flexibility, combined with their dramatic impact on occupation and service term choices, makes bonuses a successful option for short-term management of enlistment flows and for targeting incentives toward particular subgroups.**

ANALYTICAL METHOD

Experimental results were analyzed with multivariate simultaneous equations that compared year-to-year changes in monthly enlistment totals between the current and new programs, adjusting for changes in extraneous factors that might have affected the results. This method controlled for many types of influences, such as any differences in demographic characteristics between programs and any changes in national attitudes toward military service over the course of the test. The analytical method also accounted for the possibility that a bonus-induced enlistment increase might be offset by a concomitant decrease in recruiter effort—a possibility not usually considered in manpower studies. The results of the analysis thus represent the effects of the bonus increases alone.

This research brief describes work done within the Forces and Resources Policy Center of RAND's National Defense Research Institute for the office that preceded the Under Secretary of Defense (Personnel and Readiness). It is more fully documented in The Enlistment Bonus Experiment, by J. Michael Polich, James N. Dertouzos, and S. James Press, R-3353-FMP, April 1986, 73 pp., \$7.50, available from RAND Distribution Services (Telephone: 310-451-7002; FAX: 310-451-6915; or Internet: order@rand.org). Abstracts of all RAND documents may be viewed on the World Wide Web (<http://www.rand.org>). Publications are distributed to the trade by National Book Network. RAND is a nonprofit institution that helps improve public policy through research and analysis; its publications do not necessarily reflect the opinions or policies of its research sponsors.

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