

RAND

*Attracting “Cutting-Edge”
Skills Through Reserve
Component Participation*

*Gregory F. Treverton, David Oaks, Lynn Scott,
Justin L. Adams, Stephen Dalzell*

*Prepared for the
Office of the Secretary of Defense*

National Defense Research Institute

The research described in this report was sponsored by the Office of the Secretary of Defense (OSD). The research was conducted in RAND's National Defense Research Institute, a federally funded research and development center supported by the OSD, the Joint Staff, the unified commands, and the defense agencies under Contract DASW01-01-C-0004.

Library of Congress Cataloging-in-Publication Data

Attracting "cutting-edge" skills through reserve component participation / Gregory F. Treverton ... [et al.].
p. cm.
"MR-1729."
ISBN 0-8330-3445-6 (pbk.)
1. United States—Armed Forces—Reserves. 2. United States—Armed Forces—Recruiting, enlistment, etc. 3. Manpower—United States. 4. Military readiness—United States. I. Treverton, Gregory F.
UA42.A88 2003
355.2'23'0973—dc21

2003014361

RAND is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND® is a registered trademark. RAND's publications do not necessarily reflect the opinions or policies of its research sponsors.

© Copyright 2003 RAND

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from RAND.

Published 2003 by RAND
1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
201 North Craig Street, Suite 202, Pittsburgh, PA 15213-1516
RAND URL: <http://www.rand.org/>

To order RAND documents or to obtain additional information, contact Distribution Services: Telephone: (310) 451-7002; Fax: (310) 451-6915; Email: order@rand.org

Summary

This report focuses on one critical slice of the ways the Reserve Component (RC) makes needed skills available to the Active Component (AC): attracting “cutting-edge” skills. We define *cutting-edge skills* as those that are

- complex, therefore time-consuming and expensive to train
- generally either not produced in large numbers or, as in information technology (IT) and other engineering fields, subject to “boom and bust” cycles, periodically making them in scarce supply for the military
- primarily developed and used in the civilian world, but less frequently or intermittently used in the military world (for instance, linguists, area specialists, information system designers)
- generally without a long-term career development path or even requirement within the military
- difficult to keep current. For instance, the military is normally a consumer of rapid technological advances but only infrequently a producer; specific language skills are infrequently used in the military and are hence hard to maintain
- often not tightly connected to the combat components of the military
- needed quickly in a crisis. The military cannot wait for months or years to obtain such skills when war or international crisis is imminent.

IT specialists are the most often cited example of cutting-edge skills. Specialists in unusual languages are another: Their skills may be obsolete if not used and may be quickly needed, but they will not be developed or sought by the private sector in large numbers.

In thinking about how to attract such skills into the RC, we examined a wide range of policy ideas. In the end, we focused on five policy ideas that seem both worthwhile and feasible:

1. Civilian Skills Database
2. Expanded “Participating IRR” (Individual Ready Reserve)
3. “Tailored” ESGR (Employer Support to Guard and Reserve)

4. RC-Focused PaYS (Partnership for Youth Success)
5. Critical University Talent Program.

This report analyzes each in terms of difficulty, cost, and attractiveness to those with cutting-edge skills. We describe the ideas briefly here. (The analysis is summarized in Table S.1 on page xiv.)

1. **Database of Skills Possessed by Existing RC Members, Especially Those in the IRR.** The best place to start in harnessing skills in the RC is with the skills that are already present. But databases used by RC managers generally contain, at most, the current civilian occupation of service members. They are neither timely (occupation information is rarely updated), broad (only one occupation can be maintained in most databases), nor deep (what kind of programs can this software engineer write?).

Better databases could produce a relatively short-term “win-win” situation. This initiative would draw on databases already being developed by the RC—Joint Reserve Intelligence Planning Support System (JRIPSS), Army Reserve Civilian Acquired Skills Database (CASDB), Naval Reserve Skills Online, and related systems—to provide a basis for eventual transfer to the Defense Integrated Military Human Resources System (DIMHRS). The most difficult part of the task is getting service members to enter and update data. A variety of incentives could be offered, from exhortation to pay for one training period.

2. **Expanded “Participating IRR.”** This program, based on an existing Air Force program, would aim to identify, track, and reward a subset of IRR members who want to serve. They could be given particular incentives—perhaps pay, but also training opportunities or health, retirement, or other non-salary benefits, although some of these non-salary benefits, health care in particular, can be expensive. Particular cutting-edge skills, such as foreign language or technology skills, might be special targets. Participating IRR members would not be counted against unit strengths or ceilings.
3. **“Tailored” ESGR.** This program would build on the basic structure of the existing ESGR but would seek to foster more and better connections to employers. The ESGR organization may provide the fastest and most effective means to access these critical, cutting-edge resources. It understands the constraints of both the employer’s willingness and ability to contribute employees and an employee’s willingness to participate. In particular, ESGR could enhance the targeting of its message to specific geographical regions, industry sectors, and firms where critical skills reside. Its role would be to

identify the location of specific critical skill talent pools that exist in industry sectors and specific firms within those sectors, and develop comprehensive, targeted marketing strategies to industry leaders, business executives, and people possessing critical skills. ESGR volunteers would then help guide recruiters to talent pools of special interest.

4. **RC-Focused Program Modeled on PaYS.** The Army PaYS program is a partnership between the Army and participating private-sector firms. It is designed to attract young people into the Army who are interested in obtaining high-quality civilian employment after serving their terms of enlistment. During their enlistment in the Army, soldiers learn technical skills required by industry along with work ethic, teamwork, communication, and leadership. After completing their active-duty tour, the soldiers transition to the company selected during the recruiting process. By analogy, a PaYS-like program would be created for the RC in which industry participants agree to hire or give preference to members of the RC. In the program, the RC would maintain basic technical skills, discipline, and training. The RC version of PaYS might be even more attractive to companies because they would not have to wait for participants to serve their active-duty tours.
5. **Critical University Talent Program.** This new initiative would identify colleges and universities that employ faculty and produce graduates at the undergraduate and graduate levels who possess the hard-to-fill, hard-to-train, and hard-to-retain skills that the military needs. It would then identify a specific recruitment pool of faculty and students within these institutions who possess the state-of-the-art science and technical skills or the most current academic knowledge that is sought. It would then develop a retainer-based recruiting and retention program for this talent pool to work within the IRR to fulfill national security needs.

Table S.1 displays the differences among the ideas and the uncertainties about their effects.

The Critical University Talent Program, for instance, seems expensive for the talent it nets. But is it? The only way to answer such a question is to take the logical next step: pilot test the policy ideas to gain a clearer sense of their costs and benefits in terms of attracting desired skill sets. Ideally, those tests would be rigorous, with a control set of cells to assess yield and cost without the new initiative and several other sets implementing the idea in variants along critical dimensions, such as the form or size of the incentive to participate or join the RC.

Table S.1
Cutting-Edge Policy Ideas

	Program				
	Civilian Skills Database	Expanded Participating IRR	“Tailored” ESGR	RC-Focused PaYS	Critical University Talent
Purpose	Identify existing RC members with cutting-edge skills	Encourage more IRR members to participate	Recruit critical skills through companies	Increase number of RC recruits by broker-ing connection to employers	Get critical university-based talent on retainer
Targets	All current RC members	IRR members, especially those with cutting-edge skills	Companies identified as cutting-edge	Non-prior service possible recruits	Federal-grantee university departments
Incentives	Pay for training period Retirement points “Yellow pages”	Pay Retirement points Other non-salary	? More-aggressive RC outreach to private sector	Only the chance to interview with companies	Stipends to graduate students and faculty
Yearly program costs	\$20–30 million if training pay included	Very dependent on mix of incentives	\$5–10 million	\$2 million	\$20 million for 100 retainers
Number of skill sets produced	4,000?	10,000?	?	? (15,000 might participate)	100?

NOTE: A question mark refers to uncertainties in this area.

^aSee page 10 for an explanation of this concept.