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Taken for Granted: Over Here

Beryl Loeff Benderly
United States
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Lt. Burt Baskin was a World War II Navy quartermaster running a PX at a base on the South Pacific island of New Hebrides when he made a fateful swap with a supply officer off a visiting aircraft carrier. In exchange for a jeep, Baskin got a large ice cream maker. Soon his customers were enjoying refreshing scoops flavored with the island's exotic tropical fruits. Back home in California after the war, Baskin teamed up with his brother-in-law, Army veteran Sgt. Irv Robbins, to sell creatively flavored cones to civilians.

Some veterans may prefer to trade the tools of their military trades for protractors, compasses, and tracking calculators--what a corny joke calls "weapons of math instruction."

PICKING A FIELD

Veterans thinking of graduate school leading to a Ph.D. and a research career could find a military background a career advantage, depending on the field they choose. Opportunities for Ph.D.s--veteran or non--are scanty in biomedical sciences because of the continuing oversupply of scientists and the extremely tight National Institutes of Health (NIH) budget. [Funding is rising in some other fields](#), however, and veterans may find themselves well positioned to take advantage. Under current federal budget projections, the suffering in bioscience will continue, but physical science funds are in the midst of doubling. There's a danger that this could create [employment implosion like that caused by the NIH doubling](#), but the outcome is presently unclear.

Research and development funding for national defense and homeland security are also on the rise and could spell opportunity for veterans with the appropriate experience, credentials, and clearances. The classified nature of much of this work means that qualified vets face much less competition from foreign scientists than they do in the glutted biosciences. For years now,

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defense and security research programs and contractors have bemoaned difficulties--apparently real--in finding enough technically trained people possessing or eligible for the needed security clearances.

But traditional grad school is no longer the only--or, in many cases, the best--route into careers using science or technical skills. Professional science master's (PSM) degree programs, which open lucrative opportunities in the applied aspects of scientific and technological fields, [are sprouting across the country](#). These 2-year terminal programs for students who already have a bachelor's degree do not generally provide the fellowships or assistantships that pay most people's way through traditional, Ph.D.-focused grad programs, but [enhanced GI benefits](#) could cover those costs if the bill becomes law, as it may within the next couple of weeks. Financial aid is also available.

A professional master's in a field related to national or homeland security could therefore be just the ticket for the veteran wanting to work in applied areas of science. Apart from a large number of PSM programs with foci relevant to national security topics, there currently are two PSMs dedicated to specifically defense-related topics: the Air Force Institute of Technology's "[Combating Weapons of Mass Destruction](#)" and the University of Maryland, University College's "[Biosecurity and Biodefense](#)." The Maryland program will graduate its first class next year, and program director Rana Khan expects good employment prospects. "I think there is a lot of interest," she says.

DEMAND AT THE MIDDLE

Opportunities in technical fields should also be favorable for scientifically inclined vets with hands-on skills who don't have or don't want to complete a bachelor's or higher degree, according to a report, [America's Forgotten Middle-Skill Jobs](#), by Harry J. Holzer and Robert I. Lerman of the Urban Institute in Washington, D.C. A wide variety of in-demand "midlevel" occupations, many with "technician" in the title, require technical and mathematical abilities but less than 4 years of postsecondary training. "Demand for middle-level skills and occupations will remain robust in the future, with jobs requiring postsecondary education or at least moderate-term training growing substantially over the next decade," they write.

Some of those jobs involve doing serious science in research labs and other facilities, where technicians often play important roles. The Department of Labor's [Occupational Outlook Handbook](#) foresees good prospects for science technicians in most fields and outstanding prospects in some. Technicians may need specific training or certification, which they can earn at 2-year colleges or technical schools. For some high-tech jobs, appropriate military experience may count toward required credentials or training; some employers hire experienced applicants on the basis of company tests in lieu of credentials. Security clearance opens up [numerous opportunities](#), often involving advanced technology, with commercial and government organizations involved in national defense, homeland security, and related fields. Service members can see how their particular Military Occupational Classification matches up with the corresponding civilian occupation by using an online military skills translator such as [this one](#).

FROM THE SERVICE TO THE CLASSROOM

Some veterans may prefer to trade the tools of their military trades for protractors, compasses, and tracking calculators--what a corny joke calls "weapons of math instruction." Along with those technical skills, service members often also know a great deal about communicating with and motivating young people, which could suit them ideally for another high-demand occupation, teaching math or science. The fields in shortest supply today include math, physical sciences, computers, and high-tech vocational skills.

The U.S. Department of Defense has recognized this need and teamed up with the Department of Education in a program designed to speed service members into the classroom. Called [Troops to Teachers](#) (TTT), it provides eligible individuals with stipends to cover the costs of qualifying for teaching certification and links them to a network of state offices that helps them get through the process and find jobs. It even offers \$10,000 bonuses to those who teach in high-need schools. Eligible service members generally include those who have retired, separated because of disability, or done 6 years of service, but eligibility requirements are quite specific, so [check them carefully](#).

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Veterans who don't qualify for TTT could use GI educational benefits to get certified. In addition, "alternative path" programs let holders of bachelor's degrees start to teach and get training on the job (see "[Certifiable: Teacher Training for Midcareer Professionals](#)"). Requirements and specific plans vary; the National Center for Alternative Certification has [state-by-state information](#). The public schools in eight states--Florida, Idaho, Mississippi, Missouri, New Hampshire, Pennsylvania, South Carolina, and Utah--and the charter schools in a number of others, for example, recognize the guided self-study program of the [American Board for Certification of Teacher Excellence](#). And in many states, people skilled in career fields don't need a degree to become vocational teachers. Again, requirements vary, so [check them out](#).

Veterans naturally should do careful research before committing to any educational or training program. But those with technical or scientific skills ought, like Baskin, to find opportunities to turn their service experience into "cool" careers.

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Beryl Lieff Benderly writes from Washington, D.C.	Comments, suggestions? Please send your feedback to our editor .
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