

The primary documentation for this is contained in the report of an Army Training Study conducted in 1977 and 1978, which has still not been officially released.

*Science* took a look at a bootlegged copy of the summary of the report, which had come in over the transom at Representative Beard's office. The report noted that there was "general tolerance of low training standards" among officers and noncommissioned officers and that "many trainers do not know current training philosophy"—that is, "they do not know how to train." The report stated that one and one-half times as much training—in both duration and frequency of repetition—is required for a category IV recruit as a category III one and that the cost of training materials such as ammunition was 40 percent more ("the effect of the lesser qualified trainee is disturbing").

The study zeroed in on a selection of 1288 tank crewmen in the United States and Europe and found that most indicated a need for more and better training. They found low performance levels in both tank commanders and gunners—aggravated by high "turbulence," which means turnover and general lack of job stability—and they also noted that "performance decay" was "significantly greater among lower mental groups."

Specifically, the study found that 17 percent of the tank commanders in Europe and 21 percent of those in the United States "did not know where to aim when employing battlefield gunnery techniques." Among the gunners, 21 and 28 percent, respectively, did not know where to aim when using battle sights. On the whole, they found tank crew proficiency 40 and 50 percent below what should be expected. Of the 1288 tank crewmen, 20 percent of the commanders and 25 percent of the gunners "did not know some of the essential basics of battlefield gunnery."

The study also looked at performance in several other specialties. It found that tank repairmen's chances of correctly diagnosing a repair problem were between 15 and 33 percent, and chances of fixing the problem, once correctly identified, were between 33 and 58 percent. One problem seemed to be that mechanics were hyperspecialized and incapable of working across the "broad spectrum" of their occupational specialties as would be necessary in actual combat.

A survey of men in charge of shooting Redeye missiles revealed that most of them felt inadequately trained. What's more, they found that the gunners in the lower mental category appeared to be in-

capable of learning the Range Ring Profile, which entails being able to differentiate between the silhouettes of Soviet and American planes.

The study also polled officers for their attitudes about training and found a high degree of complacency, with most expressing "apparent satisfaction with poorly trained personnel." There has been "little perceived change in the training environment since 1971. The environment is still seen as hostile to the conduct of good training."

The report lamely notes at one point that in visits to the field, investigators did encounter "many pockets of competence."

The Army is trying to pull up its socks in the face of all this bad news. All its ability and skills tests are undergoing extensive reevaluation, and it plans to develop a coherent Army-wide system of training. But meanwhile, its responses to criticism have been evasive, the tendency being to minimize the problem by lowering standards. Many training manuals, for example, have been rewritten to conform to a 7th grade reading level. Skill qualification scores required for promotion have been lowered from 80 to 60 percent. And last June the Army quietly ordered that AFQT scores be removed from the files of 400,000 soldiers, allegedly to prevent their "abuse."

Trapped in a situation with shrinking resources and shortages of well-trained personnel, the Army has gone heavily into public relations as defense. Although the Defense Department's general stance is one that supports the validity of its various ability and skills tests, Army Secretary Clifford Alexander has done his best to denigrate them.

In June authorization hearings before the House Armed Services Committee, Alexander dismissed the mental categories as "fundamentally irrelevant." He said the AFQT was "really not a useful device" and that category IV was "not a mental category because it is not based on an intelligence test." Alexander said ASVAB was useful for picking people's occupational specialties, but of the AFQT he said "I am not sure that it measures anything." Asked by one member what category he thought a retarded person would end up in, Alexander insisted he didn't know.

As for the Skill Qualification Tests (which are only used by the Army) the Army has taken the stance that these are still in the early stages of development and have not been properly validated against job performance. An Army public relations person explained to *Science*

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## Rational Suicide

Last March, Exit, a British group that supports "voluntary euthanasia," announced plans to publish a manual entitled, "A Guide to Self-Deliverance," outlining nonviolent methods of committing suicide. In July, U.S. public television aired a highly controversial program about the long-planned death of Jo Roman, a New York artist who killed herself with 30 Seconal tablets after learning she had breast cancer. And in August was announced the formation of an American version of Exit, called Hemlock, whose purpose is to promote public discussion of what has been called "rational suicide."

It seems that the death with dignity movement has entered a new, more explicit phase marked by increasing talk about enabling terminally ill and suffering people to bring about their own ends.

Hemlock, based in Santa Monica, was formed by Derek Humphrey, a British journalist who wrote a book in 1978 called *Jean's Way*, a chronicle of his wife's battle with cancer and suicide from a drug overdose. Humphrey says that the group's function will be primarily informational. It also plans to publish a suicide guide of sorts which, rather than being a cold list of recipes, will present detailed case histories of suicides. "We've read the Exit booklet," says Humphrey (to be published in Scotland to avoid running afoul of English laws against aiding and abetting suicide) "and the general feeling is that it is a bit too clumsy and technical." The Exit booklet describes four bloodless ways of committing suicide and contains a long appendix of lethal doses of prescription and nonprescription drugs.

There already exist two major American organizations that worry about death. The Society for the Right to Die lobbies for state legislation giving people control over whether to submit to extraordinary life-preserving measures. Then there is Concern for Dying, which has so far mailed out about 4 million copies of the Living Will, a document in which people can stipulate when they want treatment withdrawn. Both of these groups oppose the dissemination of information on suicide methods. A. J. Levinson, director of Concern for Dying, says that

acceptance of suicide as an option can detract from the larger issue, which is bringing more humane care to terminally ill people.

Cicely Saunders, director of St. Christopher's hospice in London, is strongly opposed to the movement supporting voluntary euthanasia on the ground that "committing suicide will no longer be seen as a right. It will fast become a duty."

Humphrey argues that even in hospices, where management of pain and suffering takes precedence over prolongation of life, one in five of the patients dies a painful death. He believes that no matter how much institutional care improves, there will always be people who want, and have a right, to arrange their own deaths.

## Not What You Know but Where You're from

Two psychologists have completed a project which they believe demonstrates that scientific journal reviewers are often unduly influenced by the institutional affiliation of authors whose papers they review.

The pair, Stephen Ceci of the University of North Dakota, and Douglas Peters, now at Cornell University, selected ten articles published in ten widely read psychological journals. They rewrote the abstracts, doctored opening sentences, and substituted fake names and institutional affiliations for the authors. Then they re-submitted the papers to the journals that had published them. Reviewers for three of the journals spotted the deception. The other seven papers went through the normal process. Ceci and Peters report that, of the 22 editors and reviewers involved in reading the papers, only four recommended publication—which adds up to a 73 percent rejection rate by journals for papers they had previously accepted.

The study will no doubt bolster the complaints of many junior investigators who believe a system of "blind reviews," where the author's identity is removed from the paper, may be the only way to prevent reviewers from being influenced by institutional affiliations.

What did the journal editors think of the study? Ceci says two of them were defensive and dismissed the study as "trivial," but the rest were cooperative. Garth Thomas, editor of the *Journal of Comparative and Physiological Psychology*—which accepted the paper resubmitted to it—agrees that affiliation with a prominent institution definitely has a "halo effect," but thinks the bias only operates with "marginal" papers.

The authors submitted their study to *Science*, but it was rejected.

## House Report Nails AEC for Sheep Deaths

Question: What, in the summer of 1953, was "hotter than a \$2 pistol?" Answer: certain Utah sheep, as described by scientists from the Atomic Energy Commission (AEC), in a preliminary investigation of mysterious sheep deaths following two atom-bomb tests.

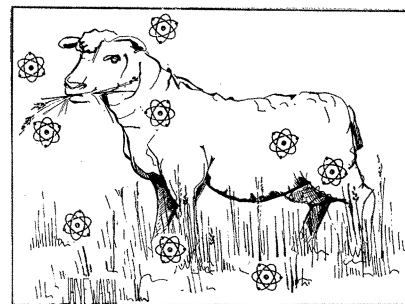
According to a recent House report, however, the AEC more or less swept the hot sheep under the rug and indeed suppressed information that might have implicated radioactive fallout in the widespread ovine fatalities that year.

The House subcommittee on oversight and investigations last summer held hearings in Nevada and Utah as part of an ongoing effort to determine whether the government was responsible for sheep deaths as well as for allegedly high cancer rates among people living downwind of the Nevada Test Site. So far about 1000 people have filed for damages against the government.

After hearing extensive testimony, including a study of sheep deaths by a former member of the AEC Fallout Studies Branch, the committee has concluded that "sufficient evidence exists for the government to accept at least compassionate responsibility, if not strict liability," for human injuries, and recommends passage of legislation (already introduced by Senator Edward M. Kennedy (D-Mass.) and Representative Gunn McKay (D-Utah) amending the Federal Tort Claims Act to allow for compensation of the alleged victims.

The committee comes down very hard on the AEC, claiming that the government "knowingly disregarded and suppressed evidence correlating the deaths of the sheep to exposure to radioactive fallout," and asserting that fallout "more likely than not" was the cause.

The scientific evidence for the committee conclusion comes from former AEC official Harold Knapp, who put together a 450-page report on the sheep deaths in his spare time. Some 1,420 lambing ewes and 2,970 new lambs, out of a sheep population of 11,710, died during the spring and summer of 1953. Although the AEC cites bad weather and lack of forage as a prime cause, Knapp says that the most likely explanation of the



ewe deaths was eating radioactive grass, which led to irradiation of the gastrointestinal tract, and that newborn lambs died from prenatal accumulation of radioactive iodine in their thyroid glands. The AEC at the time claimed that sheep grazing downwind did not suffer effects resembling those experimentally induced at the Hanford Atomic Products Operation in Richland, Washington, where pregnant ewes had been fed radioactive iodine. And it said that surviving ewes in the population affected by atomic blasts showed no thyroid abnormalities.

Knapp contends that the AEC failed to look at the gastrointestinal tracts, where fresh fission products would have their primary effects. He also says that most AEC measurements were made on sheep that were not in the highest fallout area.

In a 1955 lawsuit by sheepmen to claim damages from the government, the judge reluctantly ruled against them, in large part because the AEC had classified all the relevant documents and the sheepmen had no expert witnesses to testify on their behalf.

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