News and Comment

Melman: "Overkill" Critic Finds a Welcome Reception in Capital, but the Reasons Are Complicated

During the past year, one of the most curious phenomena in Washington has been the burgeoning influence of Seymour Melman, a Columbia University professor who is fiercely critical of American defense policy.

Melman, who teaches industrial and management engineering, is not one of the administration's academic imports; his connections with the capital's traditional channels of power seem to be nonexistent, and he appears to operate on something of a financial shoestring. Nevertheless, Professor Melman, like him or not—many do, many don't, but few who know him fall in between—has become an extremely influential factor in some of the most serious defense-policy thinking that has gone on in the capital in a long time. The Defense Department, and particularly the Air Force, has long wished this weren't so, and has said it couldn't be so, but the rumblings that Melman has incited on Capitol Hill and elsewhere have now been detected by the Pentagon, and, belatedly, it is acknowledged that the professor is more than a noisy nuisance.

Melman has come to public attention as the energetic advocate of a series of disarmament proposals, all of which rest on his contention that we are now equipped to kill the Russians so many times over that it is costly madness to accumulate more destructive power. In fact, says Melman, we could substantially reduce our nuclear retaliatory power, as well as other military preparations, and still have the ability to transform the Soviet Union into one smoking crater. The Air Force, which is the principal custodian of the weaponry Melman would reduce, has often been accosted with this or similar theses, but, in a stance of dignified silence, has generally declined to offer rebuttal. But Melman, almost single-handed, has thrown it into the sort of agitation that usually arises only upon discovery that the wings are falling off. And, in recent months, Melman has so gotten under the skin of the military that the tradition of aloofness has been abandoned and a number of fairly elaborate rejoinders have been issued.

On the basis of the response alone, the Melman thesis would qualify as something of interest to students of national security affairs, but going one step further, it can be argued that Melman as a political phenomenon is even more interesting than Melman as a strategic thinker. After all, others, notably the physicist Ralph Lapp, author of *Kill and Overkill*, argued earlier or better than Melman that the U.S. has acccumulated unreasonably large nuclear power. But in a capital that tends to be choosy about issues and advocates, the Columbia professor has clearly taken the lead among self-appointed critics of defense policy. The reasons for this offer some instruction on the current politics of defense, and they can perhaps best be examined by looking separately at the Melman thesis, the manner in which he has presented it, and the environment in which he has succeeded.

Melman's Argument

The thesis was summed up last April by Melman in a pamplet, *A Strategy for American Security—An Alternative to the 1964 Military Budget.** It starts with the universally acknowledged fact that the American nuclear force is huge, and then, employing a report on megatonnage and nuclear delivery systems drawn up by the Institute of Strategic Studies (ISS), of London, goes into an analysis of its size and destructive potential. Says Melman, the 20-kiloton bomb dropped on Hiroshima killed 100,000 people. (The generally accepted figure is 68,000—a fact noted for the sake of accuracy, not as a consolation.) Assuming, then, he continues, that 20 kilotons will produce 100,000 deaths, the United States, with strategic nuclear weapons reported by the ISS to total 21,970 megatons and aircraft and missiles totaling 3390, could "overkill" the Soviet population 1250 times, even if half the weapons failed. Or, continues Melman, assume a 1-megaton bomb on the 140 major cities of the Soviet Union, assume the same 50-percent weapons failure, and the overkill capacity is 78 times.

"Within any technically plausible framework of reasoning," he states, "the conclusion is that the U.S. possesses overwhelming nuclear destructive capability." This being so, contends Melman, the United States could have safely cut the 1964 military budget from $56.7 billion down to $34 billion, a level that he says would suffice for the maintenance of existing forces. In particular, he would have reduced expenditures for military research, development, testing, and evaluation from $7.2 billion to some $200 million, which he would have turned over to the National Science Foundation to support the nonmilitary basic research that has been financed through the Defense Department.

As an alternative to the $34-billion budget Melman offered a total defense budget of $9.2 billion, a "finite-deterrent" budget which would limit our military establishment simply to 200 secure missiles. In either case, with the savings obtained from these massive reductions in defense spending, Melman would have the United States embark on a gigantic program directed toward domestic needs and foreign aid. This program, he argues, would politically and economically embarrass the Soviets into a similar downgrading of their defense priorities, thus ending the arms race and simultaneously benefiting mankind, goals that no sane man would oppose.

Though Melmanites, like all true believers, insist that their case is flawless, the fact is that the doctrine is faulty in numerous details; but, paradoxically, it has turned out to be quite compelling—even to many of those who acknowledge its deficiencies.

Perhaps the most conspicuous of these deficiencies is the casual treatment of numbers. Accepting the ISS figures as gospel, Melman states that the U.S. had 940 intercontinental ballistic missiles operational in 1963. However, the Defense Department, which

* Melman is also the author of two other works on national security affairs, *The Peace Race*, and *Inspection for Disarmament*.

has generally followed a policy of telling the Russians how well equipped we are to destroy them, never remotely claimed anything approaching Melman's figure, simply leaving the number late in 1963 at "over 500." (Melman, of course, can put the blame on the ISS, but since better sources, including congressional testimony by Defense Department officials, were available at the time, why should that excuse carry any weight?) Melman's 940 ICBM's included 500 solid-fueled Minutemen missiles, but as of mid-1963, the Defense Department reports, the U.S. had only 160 of these. His 940 also included 200 liquid-fueled Atlas and Titan missiles, without reference to the fact that many of these were to be dismantled as the more reliable Minutemen came into service. Furthermore, on the basis of the ISS report, Melman listed 15 Polaris submarines, each with 16 missiles, as being in service in 1963. The Navy, which is pleased to tell the world about its Polaris fleet—each new vessel is a major undertaking for the Navy's publicity forces—claimed to have only 11 in service as of last March. And the Navy has stated that, at any one time, a number of these are in port for maintenance or crew changes.

Melman also listed 600 B-47 bombers as operational in 1963, without noting that these, like the liquid-fueled missiles, were being retired in favor of the Minutemen. And finally, he included, in his delivery-vehicle total, 1150 Navy aircraft, although part of the carrier fleet on which they depend normally operates out of range of the Soviet Union.

Thus Melman's arithmetical performance smacks more of a watered stock operation than a responsible analysis. But in terms of strategic concepts, his performance is probably even more deficient. Melman bases his "overkill" argument on the assumption that even with a 50-percent attrition rate in nuclear force, the U.S. could massacre the Soviet Union many times over. But, if one accepts the premise that the threat of retaliation is what keeps the Russians peaceful, the Melman allowance of 50 percent attrition is not particularly assuring. Conceivably, in the confusion and destruction of a nuclear holocaust, far more than 50 percent of U.S. weapons would fail to reach their targets. The U.S. has not absolutely foresworn a first blow, but the high probability is that a nuclear exchange would take place only after the United States had been attacked—and had suffered some losses to its retaliatory power. Furthermore, no more than half the bombers in Melman's retaliatory total are on short alert—and prudence therefore calls for considering the remainder unusable. Secretary of Defense McNamara, in response to attacks by Senator Goldwater, has vouched for the reliability of the missile force, but he put this reliability at 70 percent. Moreover, though a legitimate controversy continues over McNamara's preference for sparing Soviet cities and concentrating on Soviet military targets, the policy has a rational basis, and since there are more military targets than cities, a case exists for more delivery capacity than would be required if the goal were simply to destroy Soviet urban centers. Finally, Melman is satisfied that no defense is possible against missiles, and in the comfort of this conclusion he makes his case for ending all military research and development, including, presumably, research on everything from waterproof boots to better warehouisng techniques. But what if he is wrong about the controversial antimissile missile? Present indications are that a missile defense is theoretically possible, but incredibly expensive. Thus, the issue for military planners, both here and in the Soviet Union, is not whether it can be done but whether it is worth doing. And what if the Soviets, in defiance of all our notions about the best use they can make of their own resources, should opt for a missile defense? Melman doesn't say. Thus, the Melman thesis, in detail, turns out to be a bad job, but the paradoxical thing is that, nevertheless, Melman has found a warm and widespread welcome in the capital, even among those who acknowledge that his argument is full of holes.

Goulash versus Guns

Several factors seem to account for this: (i) a growing weariness—all across the political spectrum—with the burdens of the Cold War: Khrushchev says that goulash is better than armaments, and Johnson says that the money for his war on poverty can be squeezed out of the defense budget; (ii) Melman's incredible energy; and (iii) an odd fact of congressional life—namely, that anyone with enough perseverance can get in to see almost any member of Congress, from the most obscure to the most powerful.

That Melman has been persevering is something that even his bitterest opponent will concede. During the past year he not only has personally sat down with more than 150 members of Congress or their staffs but, in a brilliant coup that made the most experienced Washington lobbyists look like lost tourists, he even got into the White House to talk to Johnson. This feat the zealous professor accomplished in the second week of Johnson's incumbency by simply asking a civil rights leader, who had an appointment with Johnson, whether he might tag along. Kennedy's staff had repeatedly turned down Melman's request for an appointment, but apparently a new White House staff man, unacquainted with the name Melman, said bring him along. Johnson, it has been reported, cooled quickly when he caught the Melman theme, quite likely on the grounds that in his own struggle to cut the defense budget he could do quite nicely without supporters like Melman. But the White House visit, despite copious explanations of its quirk genesis, added to the Melman image, and thus linked his name even more tightly to the large, and growing—though by no means dominant—congressional disenchantment with the size of the defense budget.

And it is this sentiment, which dovetails with Melman's theme—though not with his figures and his analysis—that has made the lone professor an astonishingly influential figure in a relatively short time. As one member of the House put it, "Melman may be cockeyed, but, damn it, we have too much of this nuelear stuff, and he's carrying the ball." Or as a Senate staff member with whom Melman once conferred put it, "Melman is not particularly reliable, but he is a useful corrective to the excesses of the other side."

Supporting this perception of Melman as a useful, though not a particularly reliable, tool is a feeling on the part of many legislators that for too long now the military has written its own ticket and Congress has paid for it without asking hard questions. This feeling, in turn, has provided a ready audience for the ubiquitous Melman, who comes equipped with charts, tables, footnotes, and ready answers to any and all questions. For the legislator who has heretofore had to rely solely upon Defense Department explanations when he felt troubled by the immensely costly and still growing nuclear stockpile, Melman—with the

paraphernalia and credentials of the academic world—has turned out to be a refreshing source of alternative arguments.

Under these circumstances, Melman has supplied a good amount of fuel for an already brisk fire, with the result that this year, for the first time, Congress is likely to subject the Defense budget to more than the usually perfunctory debate. In the last session, Senator George McGovern (D–S.D.), who is an ideological distant cousin of Melman's, sought to exploit some of the Melman-abetted fervor by seeking a simple 5-percent cut in the defense budget. He got two votes for the record. But he also got a lot of whispered support, some of it from very surprising places, which has led him to believe that the atmosphere is improving for an assault on the defense budget. It hasn't improved to the point where anyone really expects Congress to suddenly reverse its annual tradition of treating defense requests as sacrosanct, but the thesis of "too much" has clearly infected the legislative scene, and this, in turn, ties in with some other aspects of defense politics.

Within the Pentagon there is no love for Melman, but the hostility toward him is not evenly spread. The civilian directors of the Pentagon, who are caught between Melman's cries of too much and the Air Force's dire warnings of too little, seem to regard Melman's thesis as nonsense, but nonsense that is not altogether without utility in their struggles with the Air Force. When Melman first began to stir up the Capitol with his industrious canvassing of congressional offices, McNamara, upon request of an early Melman supporter, Representative William F. Ryan (D–N.Y.), had a rather quick and lean rebuttal prepared. The gist of this was that defense policies have been carefully worked out and we should all feel confident in their wisdom.

This, of course, did not satisfy Melman, but even less did it satisfy the Defense Department subsidiary toward which Melman has principally directed his fire—the Air Force. So, the Air Force has been grinding out its own rebuttals. Last February, for example, *Air Force and Space Digest*, a monthly magazine that regularly reflects Air Force thinking, featured a thoughtful analysis of Melman by Amron Katz, of the Rand Corporation. In the same issue it also reprinted an article on overkill by General Thomas S. Powers, commander of the Strategic Air Command. And last month there appeared separately a 69-page paper titled "A Response to Professor Melman and 'Overkill'." This was prepared by Murray Green, a civilian in the research and analysis division of the office of the Secretary of the Air Force. Quite possibly, the object here was a forensic overkill of Melman, for the paper not only argued about his numbers and analysis but went so far as to point out that Melman has a "modest military background consisting of about 1½ years of duty," all in the continental United States during World War II. (For what it's worth, Green had 4 years' service as a junior naval officer in the Pacific during World War II.)

In any case, no rebuttal is likely to dampen Melman. He is riding a rising issue, and, interestingly, is using some of the very same tactics of excess and fright which have so well served the Air Force in its budgetary campaigns. Perhaps the thing for which we should be most thankful is that they are not on the same side.—D. S. GREENBERG

Industrial R&D: Competition from Universities, Non-Profits, Alarms Independent Laboratories

Standing outside the tight R&D club formed by government, industry, and the universities—and trying hard to get some attention for itself—is a small segment of American business composed of private commercial scientific laboratories. These laboratories perform a variety of chemical, engineering, and business services at a fee for industry and government, mainly along such lines as product development and testing, investigation of materials failures, and so on. Eighty of these laboratories are affiliated as the American Council of Independent Laboratories (ACIL), an organization which, since its establishment in 1937, has been sporadically protesting what it calls the "trend toward commercialism of research in universities." In a series of letters to congressmen, public appearances, and pamphlets, ACIL representatives have recently made it plain that they regard such "commercialism" both as intrinsically objectionable and as unfair competition with the legitimate activities of private enterprise.

The ACIL is a peculiar hybrid, part lobby, part professional society. Membership, by invitation only, is extremely restrictive. Member labs must be firmly established as going businesses, and they must be "unaffiliated with any academic or governmental institution or with any outside industrial company or trade group." These qualifications not only exclude the couple of thousand one-or-two man labs that might give ACIL a foothold in enough congressional districts to get some support, they also exclude the most common phenomena in this type of work—the three or four professors who set themselves up as consultants, the industry-sponsored research laboratory, and the university-affiliated research institute. ACIL members vary both in scope and size, the average probably having something over 50 employees. Among the largest are the Barrow-Agee Laboratories in Memphis; Froehling and Robertson in Richmond; and the Shilstone Testing Laboratories, with offices in several southern cities.

In trying to get attention for its claims, the ACIL is at a considerable disadvantage. In the first place, at a time when, as the joke goes, "all the money is in the non-profits," these outfits are frankly trying to operate profitably. Secondly, they practice a specialized kind of research that keeps them apart from the policy-making groups that oversee most of the relations between science, government, and industry. Thirdly, the private laboratories are trying to enforce a distinction between basic and applied research which it is rapidly becoming fashionable to overlook. And, finally, all the arguments appear to be weakened by the very large dose of self-interest that underlies them.

Nonetheless, however minute ACIL's chances of overturning the flourishing system it has been protesting—and most of the group's spokesmen readily admit that such an overturning is highly unlikely—the ACIL arguments illuminate a specialized aspect of the "research boom"; they are restrained and dignified; and they deserve some attention, if only as a reminder that one man's fortune is another man's headache.

Basically, the ACIL believes the functions of a university are to teach the young and to promote basic knowledge. When any offshoot of the university—an individual, a department, or a subsidiary institution—trading on its reputation, leaves the classroom and turns to evaluating, say, razor blades, it is not only diverting teachers from their basic purpose but taking advan-