

Civvies for the American Military Economy?

As the cold war fades into history, policy makers are beginning work on trimming the military budget. But how easily can companies that serve the military convert their operations to civilian use? Seymour Melman, professor emeritus of industrial engineering at Columbia University and chairman of the National Commission for Economic Conversion and Disarmament, and Lawrence Klein, Benjamin Franklin Professor of Economics at the University of Pennsylvania and a Nobel laureate, discussed the economic consequences of smaller military budgets with Joel Kurtzman of The New York Times.

Q. Will companies that produce for the military be able to convert their factories to civilian use as the military budget is trimmed?

Mr. Melman: Companies that supply the military are operating in a cost-maximizing mode. Based on the available evidence, it is not prudent to assume that these same firms could satisfy the demand for civilian products. Military-industry managers have what Theodore Levitt once called a "trained incapacity." They can't function in a civilian market. They can't design products for the civilian consumer market like tape recorders, VCRs, etc.

Q. If these companies can't produce for the civilian market, then will cutbacks in the military mean more imports and higher unemployment?

Mr. Klein: Not necessarily. Too few military contractors that I know of

have been able to shift to civilian production. But some did. I did some computer work, for instance, with Boeing Computer Services.

Mr. Melman: Pardon me, but were you referring to Boeing Computer Services as a military contractor?

Mr. Klein: No. It is a civilian company. But it is a civilian alternative for Boeing after cutbacks in military spending.

Mr. Melman: Ah, but you see, this is a very important matter. We have to make some differentiations here. The larger companies typically have a variety of divisions, some serving the military and some serving the civilian sector. In the case of Boeing, the military contractors are notably different in their internal modus operandi from the civilian facilities. Even the plants and management systems are different.

Q. Can't military managers learn from civilian managers?

Mr. Melman: There was a very important attempt made by Boeing's Vertol division outside Philadelphia. Boeing attempted to go from making helicopters for the military to producing electric trolleys, trams, light rail vehicles and subway cars.

It failed. The reason it failed is because Boeing did nothing but operate by methods that were well accepted on the military side. In fact, of the 60 or so engineers that worked on this project, all but one had come out of military aerospace. The other engi-



Lawrence Klein, left, and Seymour Melman discuss how to wage a peace economy.

neers had no training in cost-minimizing design.

They also operated in the standard Pentagon fashion called "concurrency," meaning they did the design, testing, evaluation and production all at the same time instead of dealing with each of those operations sequentially. As a result, the items they produced and delivered to customers were not properly tested. One unfortunate customer was the Massachusetts Bay Transportation Authority. The cars it received suffered from extreme unreliability and unaccept-

able breakdown rates. There was a parade of lawsuits and then Boeing abandoned the whole affair.

Q. What is required for a company to make a smooth transition from the military to civilian sector?

Mr. Melman: Preparation.

Q. What kind and over how long a period?

Mr. Melman: It takes two years to do serious blueprinting for changing a

military factory to a civilian one. That's the planning time. That's well established. We also must change the occupational skills of managers and engineers and some production workers. We have to train them into designing for cost minimizing. We have to train managers to deal with Sears, Roebuck rather than with Pentagon divisions. That requires, again, about a two-year period. Part-time participation in retraining work is a perfectly conceivable.

Q. So it would take about two years overall if those actions were undertaken at the same time?

Mr. Melman: Yes. About two years.

Mr. Klein: It is not just a question of retraining engineers. Retraining is important with military personnel also. Some of the suggestions that



have been made include demobilizing 100,000 troops — and that is the low end of the estimate.

Mr. Melman: In April of 1962, President Kennedy announced a comprehensive plan for achieving general and complete disarmament in 10 years on a three-stage basis. It was formally submitted for negotiations. The proposals were never negotiated because of the Cuban missile crisis, and the idea was put aside. But it was a serious formulation. The plan should be re-examined.

The military budget today is about \$260 billion a year. If we implemented the Kennedy plan over a 10-year period and reduced the budget by 10 percent a year to just enough to support an international police force, we would save a total of about \$1.3 trillion over that period.

Mr. Klein: Well, what's being talked about is not disarmament. There's talk of some disengagement, mutual arms reductions, stopping the cold war, stopping some of the arms race. But there is also talk about being ready for situations that may develop in other parts of the world. That's not disarmament.

Q. Under the Kennedy plan, would these resources become available if there were arms cutbacks?

Mr. Melman: Yes.

Mr. Klein: Another route to getting the resources would be to reduce capital costs in this country by getting interest rates down, which would come from a smaller budget deficit.

Mr. Melman: That's our perspective. The United States and the Soviet Union have both suffered badly domestically in the course of the cold war. The probable economic winners of the cold war are West Germany and Japan. The United States has been made into a second-class industrial economy with worse yet to come.

Mr. Klein: I don't agree with that at all. The United States has not become a second-class economy.

Mr. Melman: I take it as a reasonable conclusion from a set of independently checkable phenomena — the ability to produce comparable products at a competitive price. Then there's the decay in quality of life. You have only to walk out of into the streets of New York to see the evidence of it: broken streets, broken people. It's a disaster.

Mr. Klein: That's anecdotal. It is true that there's homelessness in America. It's true that we have a degraded infrastructure. But, if you travel all over America, you get a very different picture depending on where you are. What's crucial is this: We have spent less relative to some other nations, but we have gained in the last three or four years and we will probably continue to gain. Our trade balance will improve — it has improved. It will continue to improve. We will eventually get down the budget deficit.

There is much to be done, but I think it is highly premature to say that we are a second-class nation.

Q. Are you arguing that the degraded infrastructure you refer to is a result of military spending?

Mr. Melman: Yes. From 1947 to 1989, the Department of Defense spent \$8.2 trillion in 1982 dollar value on behalf of the military. That is a immense figure since in 1982 the combined value of American industry and infrastructure was \$7.3 trillion.

So we have put into the military, cumulatively, a quantity of resources more than enough to rebuild what is remaining in the United States. There's no wonder that we show a deterioration in many civilian spheres.

And take the little matter of the quantity of machines that are held by the Pentagon. The money value of those machines — including such things as airplanes, cannons, factories and so on — is somewhere more than 40 percent of the money value of all the machinery held by all of American industry.

That means that the 0 to 7 percent of gross national product spent on the military each year has had a real current and cumulative effect that weigh heavily on the competence of the industrial system as a whole.

Q. What have been the practical consequences of these expenditures?

Mr. Melman: A major part of American industry has disappeared from the United States. It was put abroad by the owners.

Q. But won't those firms come back once it's attractive again for them to relocate in the United States? Isn't that what capitalism is about?

Mr. Melman: One crucial point here. If this decay proceeds to the point where there is no longer a capacity to design and manufacture products, there's no coming back.

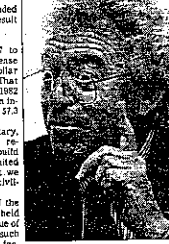
We spoke earlier of Boeing and its attempt to make electric trolleys. Electric trolleys and electric transportation are new in increasing demand in the United States. But the cities and states looking for these goods are looking abroad because there are no factories in the United States. One example: the locomotives on the Amtrak line are made in Sweden. Where are electric locomotives being made in the United States?

Mr. Klein: That's only temporary.

Mr. Melman: But soon there won't be any labor force to make those things.

Mr. Klein: The labor force changes in the sense that people can be trained. But things are becoming much more automatic.

Mr. Melman: A number of states are now asking for bids for making high-speed rail transportation: Texas, Florida, California. But the bids are all coming from West Germany



and Japan because they have a competent staff and the facilities to produce high-speed electric power.

Mr. Klein: Things change in the world. We don't live in a static world. And we're moving ahead, we're moving ahead in some lines. We're falling back in others. But on the whole, we're not losing ground. That is, on the whole, we're not a No. 2 nation, and on the whole, we can gain back whatever we have lost.