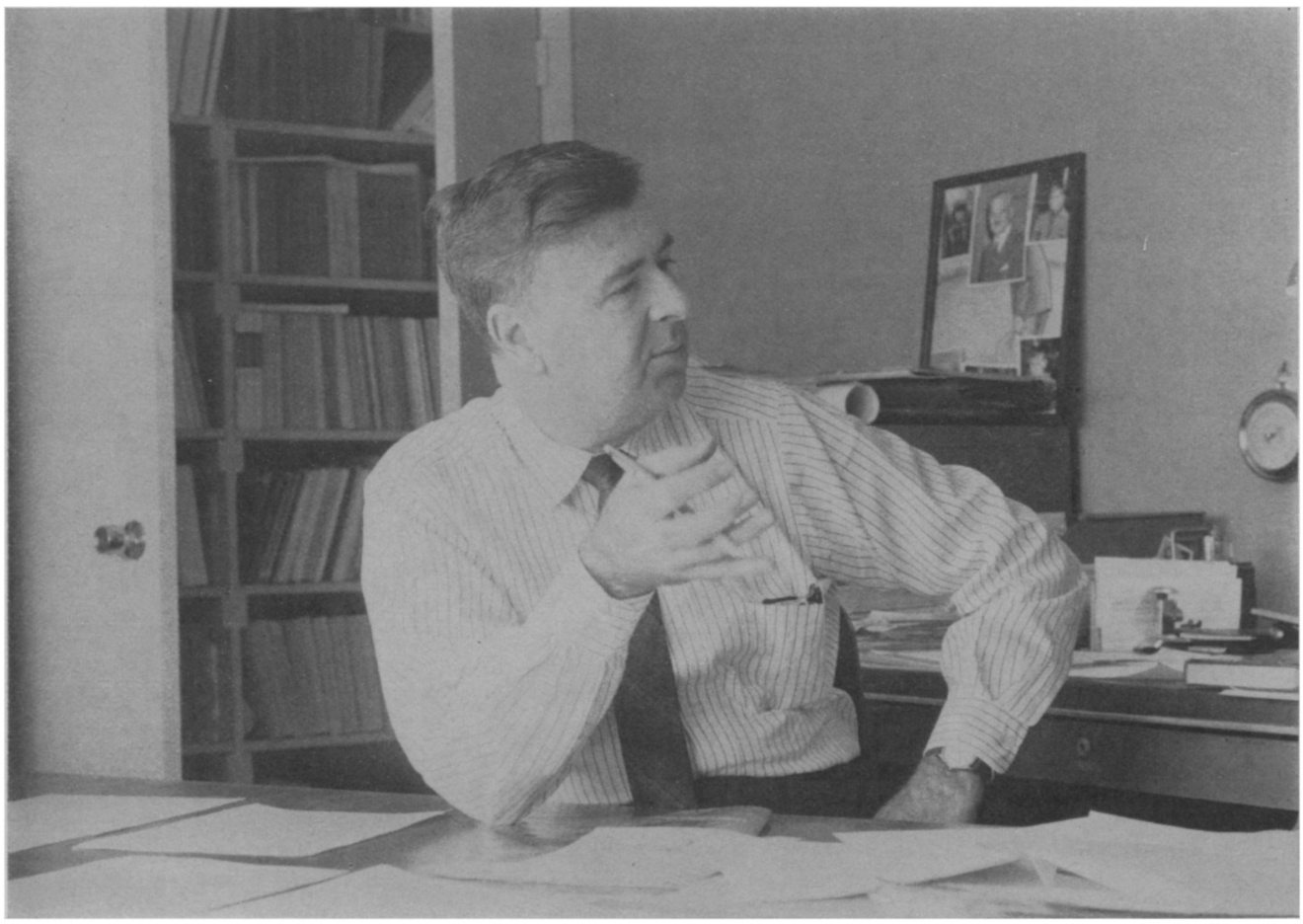
LAPP: a man and his mission



Photos: Tom Clark

"I'm a physicist, not an economist. But someone has to add up the figures."

Attacking the weapons culture

A one-man nuclear information bureau develops disturbing insights from computations that take available data to logical conclusions

by Carl Behrens

"We're living under a form of military socialism," says Dr. Ralph E. Lapp.

The nuclear scientist, who worked on the Manhattan A-bomb Project in World War II, contends that military spending has become such an important economic and political factor in the U.S. that rational decisions on how much weaponry the country needs just aren't possible.

The military-industrial-political complex has come in for criticism before, but the Lapp treatment adds something new: cold-blooded arithmetic.

A good example of this numerical approach is the question of the U.S. nuclear stockpile.

Judging from electric power consumption in weapons plants, Dr. Lapp calculates, the country has the capacity to produce almost 10,000 A-bombs a year. And until recently, the weapons plants have been operating at capacity.

This item (SN: 7/8/67, p. 31) is typical of the kind of information obtainable almost exclusively from the former Government nuclear adviser who has turned himself into a one-man bureau of war-machine statistics. It is published in his latest book, "The Weapons Culture" (See Books of the Week, p. 311.)

The number—10,000 bombs a year, each capable of reproducing the destruction of Hiroshima—has three features common to Lapp-type facts:

- It is derived from reluctantly published Government statistics, long clouded in what Dr. Lapp considers intolerable secrecy;
- It took considerable calculation and correlation with other data culled over the years to convert the published statistics into meaningful numbers;
- It represents a fact that he believes should be publicly discussed so that rational decisions on arms expenditures can be made.

"Ralph Lapp," says a colleague, "has been doing other people's homework for years. He's been adding up the numbers and coming up with answers that no one else supplies."

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Dr. Lapp agrees. "I shouldn't have had to write this book," he says, complaining of the lack of economic data on defense industries. "I'm a physicist, not an economist. I thought all these figures (there are 11 statistical appendices in the book) would have been worked out, and I could just pick them up. But I had to do it all myself."

While doing others' homework, Dr. Lapp has found himself removed from direct scientific investigation; although co-author of a respected textbook in nuclear radiation physics, he hasn't done any physical research in years.

"That's my research," he says, waving at a closetful of CONGRESSIONAL RECORDS, Government reports and press releases. Out of them he culls the information needed to make his unique judgments and estimates of the weapons economy.

Among the subjects given the Lapp treatment are the several military gaps postulated at various times in the past two decades, and the share of the U.S. economy devoted to military spending.

The gap theory, says Dr. Lapp, is a simple-minded substitute for facing the complicated facts of nuclear life. Besides being meaningless in the face of U.S. overkill ability, assertions of gap dimensions regularly turn out to be wrong. Examples:

- The bomber gap. After building 1,800 B-47 and 850 B-52 bombers in the early 1950's, the U.S. discovered that the Soviets had deployed a long-range force of only 120 Bison jet heavy bombers and 70 Bear turboprop bombers.
- The missile gap. Despite information to the contrary, President Kennedy claimed that the U.S. for several years "has not led the world in missile strength," and expanded Minuteman deployment by two-thirds and built 10 more Polaris submarines.
- The megaton gap. Latest of the strategic weapons crusades, this race is pictured as being "nip-and-tuck" at present; but more direfully, "in the early 1970's, the Soviet Union will possess a four-to-one, or possibly greater, megaton advantage over the United States."

Such megaton arguments, while likely to gain popular and political support, are meaningless, says Dr. Lapp. Once the U.S. has the capability of absorbing a first strike and returning a minimum of nuclear weapons necessary to destroy the other side (assumed by the Pentagon to be equal to 400 million tons of TNT), it doesn't matter how many missiles the Russians have.

Suppose the Soviet strategists decide they can accept 100 missiles on target. This means they would have to knock out 90 percent of the U.S. strategic capability. This would require more than 1,000 missiles, all arriving at the same time. Since missiles arriving simultaneously in Utah and Georgia would pass over the polar region at different times, the U.S. early warning system would pick them up gradually, and the first ones would trigger a massive response. The result of the arithmetic:

"Whether the Soviets had 500 or 5,000 attacking missiles, this would not prevent solid return fire far in excess of the Pentagon's rock-bottom level of 400 megatons."

When the motivation of what he calls the gap-prophets is questioned, the answer that draws the most emphasis is the stake in the economics of the weapons industry, of concern to so many influential politicians. Here again numbers are brought into play.

Employment generated by defense contracts in 1967 totaled 7.4 million jobs, including military personnel and civilian Defense Department employes. Although this was only a tenth of the civilian labor force, it is a much greater percentage of the manufacturing labor force (which in 1967 was about 19 million).

More important, defense industries are localized in states that have powerful voices in Congress. And a preponderant share of defense contractors get much of their income from the Government. (Of 38 firms that grossed more than $1 billion in defense money from 1960 to 1967, 15 gained more than half of their income from military contracts. Lockheed Aircraft, the leader with almost $11 billion, sold 88 percent of its products to the Department of Defense.)

Facing the facts of the Cold War, the physicist-turned-social-critic admits that the U.S. can't simply stop developing new weapons systems. Such deterrents as Minuteman and even the Polaris submarine could be made ineffective by new technology.

But the influence of the military-industrial-political triangle should be taken into account in public discussions of how much military spending is needed.

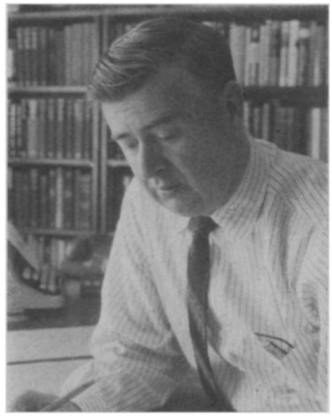
"I don't suggest that I have answers to the problem," says Dr. Lapp. "But the extent that defense spending has taken over the economy needs documenting.

"I agree that research and development in new systems is needed. The important thing is to keep deployment of weapons down to a reasonable level —for instance, avoiding building a thick antiballistic missile defense once you've decided on a small deployment.

"And actually," he says, grabbing pencil and paper, "it isn't so expensive to build just a few items. Take the unit cost of a Minuteman missile, including R and D. . . ."

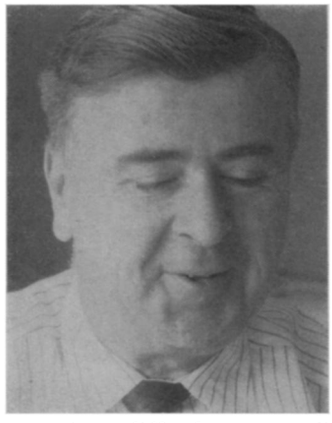
A Lapp statistic is in the making.

"The public needs facts . . .



. . . to make choices."

"For the military, enough . . .



. . . is a difficult concept."