

# The next Soviet 'Sputnik': strategic radio-frequency assault weapons

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Soviet military technology is nearing the point of catching a Gramm-Rudmanized United States, strategically flat-footed. The new Soviet weapons are fairly described as a "Sputnik of the 1980s"; they are radio-frequency assault weapons suited for use against both tactical and strategic targets. For a large portion of Soviet strategic targets these new assault weapons are as deadly as nuclear warheads.

Back in 1982, when *EIR* was outlining the feasibility of what later became known as the Strategic Defense Initiative (SDI), *EIR* was already looking at the possibility of such weapons becoming strategic weapons, although we proposed then that such weapons were a bit further down the road than SDI as such.

When the Soviets falsely accused the U.S. of intending to use a space-based SDI system as a strategic assault capability against the Russian empire, the Soviets were admitting that their own version of "SDI," on which they had been working since at least 1962, included such a radio-frequency beam capability.

Then, as a by-product of our research into certain crucial features of the physiology of human brain functions, during

1983, we found ourselves in areas of what is called "optical biophysics," which led us to map out the possibility of devising radio-frequency technologies which could do a variety of desirable and also unpleasant things. Among the effects possible, was the killing of badly behaving cancer tissue, or healthy persons, with a remarkably low wattage on the target area.

Gradually, with the aid of various specialists we pieced together the critical features of the method, and learned enough to permit the design of such weapons. During 1986, we had the opportunity to test out the principle of such a weapon's design. What was astonishing to us was the relative ease with which such a weapon could be deployed. After this, we took Soviet threats to use such weapons very seriously.

We consulted with both scientists and military professionals on both sides of the Atlantic. With scientists, we

FIGURE 1

*The first coherent radio and microwave generators were constructed with ordinary types of materials—copper wire windings, paper and plastic insulation, etc. But these ordinary materials "break down" when exposed to extremely high energy densities—intense electric and magnetic fields. That is, their chemical bonds literally are broken apart. An overloaded copper wire will melt. A heavier electric load can vaporize and even ionize it—i.e. turn it into a plasma. Plasma—a sort of fourth state of matter, liquid, gas and solid being the ordinary three—is unlike conventional materials in that it can be made stronger and more finely structured through increasing the electric and magnetic field intensities. Therefore, if properly structured, plasmas offer a means of vastly increasing both the power density and coherence of electromagnetic wave generators.*

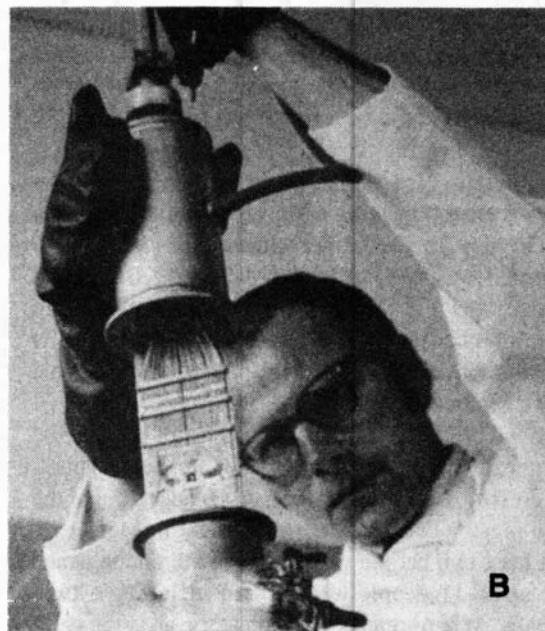
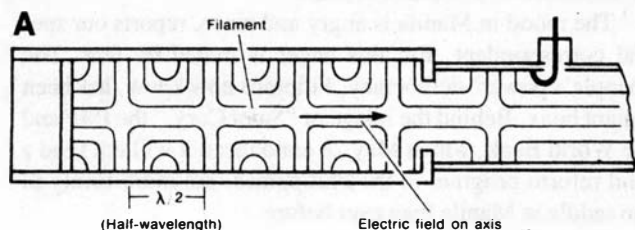


Figure 1a shows a diagram from the Soviet scientist Peter Kapitsa's work on plasma "gyrotrons"—high frequency microwave generators. Figure 1b shows a superconducting Josephson junction assembly for a computer circuit being extracted from its cooling system. These materials exhibit "plasma" behavior at low temperatures.

worked on related areas of technology, including our research into methods of biological research needed for mastering AIDS. With military specialists, we consulted on the new Soviet military options for attacks into Western Europe made feasible by use of such weapons for tactical operations and strategic assaults.

The gist of the feasibility of anti-personnel radio-frequency weapons, is that all living processes are harmonically tuned to specific electromagnetic pulses. The DNA of the cell, for example, absorbs energy at specific lower frequencies, and emits coherent pulses, somewhat like laser action, one quantum at a time, within the ultraviolet spectrum. All aspects of living processes have characteristic, harmonically ordered tuning.

This principle may be used for fundamental biological research into aspects of living processes otherwise not understood. It can be used to develop cures for such diseases as cancer or AIDS. It can also be used as the basis for design of extraordinarily efficient weapons, against unwanted hordes of insects, or persons. These weapons do not depend upon the much less efficient, lower-technology use of microwave weapons. Very low wattage per square meter on targets is sufficient.

The Soviets began to reveal much more, as they disclosed more and more of the details of Marshal Nikolai Ogarkov's pre-war mobilization program, *perestroika*. They revealed much more by the kinds of concessions Marshal Ogarkov et al. permitted General Secretary Mikhail Gorbachov to offer as "bait" to the United States, in efforts to lure the U.S.

government into a "zero-option" agreement. Since we know—contrary to many wishful Western strategic analysts and others—that Moscow is determined to win a strategic confrontation with the United States a few years ahead, we had to focus on the kinds of decisive, almost irreversible advantages Moscow would gain from—say—a 1990 implementation of the proposed "zero-option" agreements.

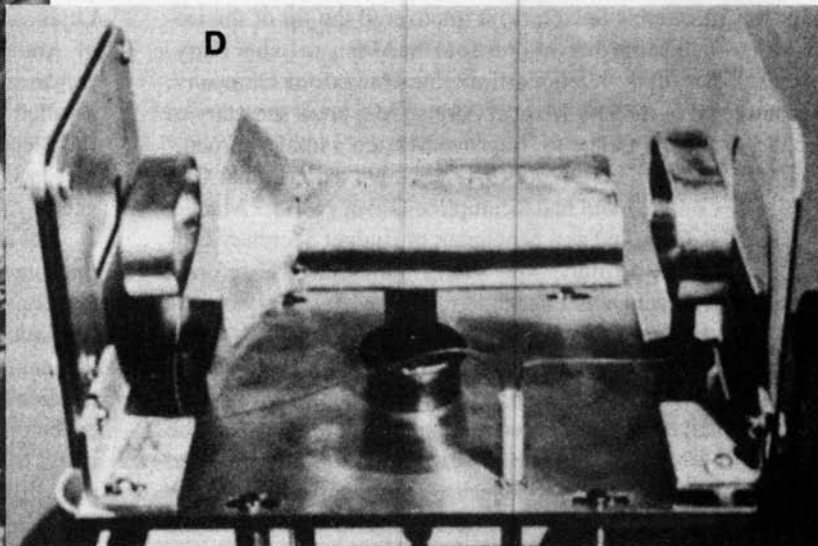
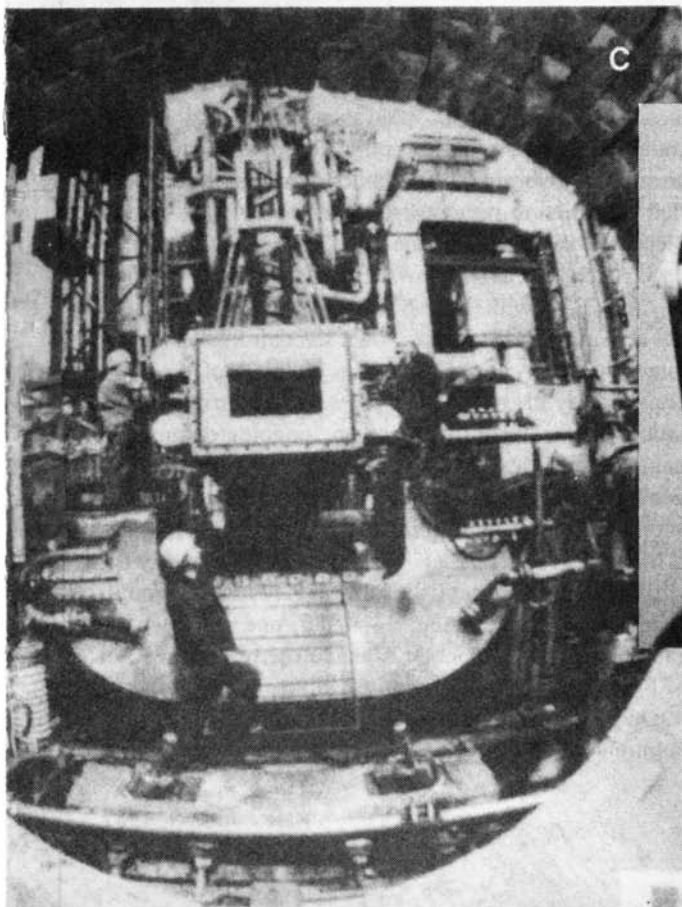
Soviet radio-frequency weapons came prominently into focus in Soviet forward war-planning for the early 1990s.

The crucial point is, that using the kinds of radio-frequency weapons we know could be produced, the Soviet military intelligence service's spetsnaz "special forces" troops, operating deep inside Western European territory, could use "hand-carry" weapons such as compact nuclear bombs and radio-frequency weapons to take out most of the approximately 250 key strategic military and logistical targets we had earlier assumed were targets for Soviet missiles' war-heads.

Instead of a Soviet GSDD force's tank assault into Germany, we must expect a major role by Soviet spetsnaz and other irregular forces behind allied lines, paving the way for an airborne assault, using Soviet tanks essentially for occupation forces, rather than forces of the initial assault. Compact nuclear bombs, in some cases, plus radio-frequency weapons, would make the difference. Soviet nuclear missile arsenals would play a part in the assault, but a smaller portion than might be otherwise assumed.

In this area of technology, the United States and its allies are potentially ahead, but only potentially.

Coming issues of *EIR* will be devoted to unveiling more of this technology, in the same way we campaigned for adoption of what became SDI back in 1982.



**Figure 1c** shows a large-scale utilization of a plasma "waveguide"—the U-25 MHD electric power generating plant in Moscow. **Figure 1d** shows the crude type of electrodes that can be utilized to generate an extremely fine-structured plasma waveguide.