

Top U.S. Strategist Charges:

'Uncle Sam Divorces Technology'

At a recent meeting of the Los Angeles Town Hall, Stefan T. Possony of the Hoover Institution of Stanford University took the U.S. Carter Administration to task for its policy toward national energy development and its antitechnology diplomacy. Entitled "Uncle Sam Divorces Technology," Possony's speech (excerpted below) to representatives of Los Angeles's industry, finance, and civic associations is indicative of the convergence of leading U.S. strategic thinkers toward active support for an energy development and economic growth-based national defense policy. On Jan. 24, Possony will address a New York conference on Middle East Peace and Economic Development on the issue of nuclear fission and fusion energy sponsored by the Fusion Energy Foundation.

About 1000 years ago, by 1000 A.D., our grandfathers, 40 times removed, assumed the men on earth would close business on 31 December 999; and, on 1 January 1000, all earthlings would depart on a trip to heaven or, more likely, to hell. Today, we still are standing at the same point of intellectual acumen. Or rather, we have been reverting to such immaturity ever since U.S. political parties and pressure groups have been turning against technology.

Antitechnology has been practiced in many countries, including Chiang Ching's China... By contrast, no anti-technology movement ever occurred in the USSR of the Kremlin's generals and the Academy's scientists.

Prominent physicists from the U.S., the USSR, Canada, France, and Japan, on November 11, 1977, issued a statement in Fort Lauderdale, Florida, and noted that the world's living standards and the size of "disadvantaged populations" would continue to rise over the next several decades. Hence, they said, demand for resources would be increasing also. "Failure to meet this demand will result in extensive evil such as poverty, starvation, unrest, epidemics, riots, and wars."

...In comparing the U.S. with foreign countries like Japan and West Germany, former Treasury Secretary William Simon recently called attention to the decline of American productivity. He declared: "Our country is drifting to the edge of the waterfall. If we don't make our voice heard soon, it won't make any difference any more."

What is going on? The U.S. is acting as though it deliberately decided to go back on technology, or much of it. Washington is not too explicit about its true objectives, but by one means or the other, it is trying out Rousseau's return to nature.

This policy is not only suicidal, it also is entirely impractical and thus insincere. No modern nation can ever

return to nature, let alone to nature as the romanticists depict it... No party ever risked to run on a zero-growth platform, but this is the policy which is being enacted. They do or don't know what they are doing. Either way there is no reason to forgive them.

It is asserted that technology depresses the quality of life — a teepee is better than a brick house. "Small is beautiful." Never mind that agriculture without machines, electricity, and fertilizers cannot feed a large and growing population, as the USSR has been proving for half-a-century. Never mind that American agriculture, which is industrialized, is feeding millions beyond our shores. Nuclear electric power generation is said to increase the danger of war — superstitions about nonproliferation have similar effects as the belief in witchcraft had 500 years ago. Why is it never mentioned that shortages of energy unavoidably cause huge disasters such as disease and international conflict?

Investments in technology supposedly delay the abolition of poverty — the opposite is true. During the last hundred years or so energy and technology effectively battled poverty — theirs was the only successful war ever waged against poverty. The victories in this war were not won by politicians but by industrialists, including the "oil barons."...

We are also told that technology cannot solve our problems because we are running out of resources, and hence are unable to supply an increasing population with growing amounts of industrial goods. We are not running out of resources. This pretext merely serves to hide the fact that today's Washington is not interested in creating new technologies.

...The marriage between science and politics never was a good one, but now a condition of near divorce has emerged. Furthermore, in a democracy, the people themselves must ultimately decide whether they want to return to the donkey and the bicycle, and to the candle and the outhouse without lock and with an open heart on the wooden door. Don't forget: if there is regression, it is the population at large — the faceless voters and non-voters — who will be the primary victims of reduction. Does anybody volunteer to become an executioner for ecology? No one does. Yet the lords of purges never lack helpers. It is the people who will decide who shall die in the process.

To vote and act wisely, the people must be kept informed. Democracy cannot be practiced effectively by uninformed or misinformed voters. Freedom of speech does not imply any tampering with the news. Yet doctoring the news, which is happening once again and soon after Watergate, remains a pastime of political partisans. The concealed pseudo-elite which is longing to dis-

mantle U.S. industry and power is trying to protect itself through news blackouts.

Unbelievable? Just as unbelievable as the fact that even patriotic politicians sometimes wish the people to remain uninformed about the facts which really matter.

Let us see how well informed the present sample of the educated reading public is: Allow me to ask you a number of questions...

Question 1: In Btu's, is the proven world reserve in coal bigger than that of oil? (Majority response: yes). Correct. Now is the U.S. reserve in coal bigger than that of oil? (Majority response: yes). Correct, but the most recent estimate of coal has gone up...

Question 4: Who heard about gas hydrates? (No response). Those are frozen methane. World deposits are estimated by the Soviets at 30 million Q, which is the 60,000 Q estimate of the U.S. coal deposit multiplied by 500. The hydrates were discovered by the Soviets and are globally distributed. The find was confirmed by the U.S. through exploration by a Glomar vessel. This information never surfaced.

Why was the news about this dramatic change suppressed? Dr. Vincent McKelvey, the Director of the U.S. Geological Survey, was fired when he talked publicly about vast amounts of pressurized gas. Dr. Schlesinger referred to it as "brine" and implied that the deposit was 1 percent of the magnitude indicated by the top U.S. geologist...

A divergence of two orders of magnitude between the two supposedly most knowledgeable officials indicates skulduggery. How come the press did not pick up this self-revealing fact?

Question 5: Did you hear that Leonid Rudakov, top electron beam expert of the USSR, briefed several U.S. labs on electron beams and provided to the U.S. new theoretical insights of crucial importance? This fact and Rudakov's information were classified by the U.S. government — a totally illegal act. (No listener had heard about the incident.) The abuse of secrecy regulations was covered in *Science* (October 8, 1976, p. 166 — this incident happened under President Ford.) But the silencing of Rudakov was approved by the press. The secreting of Rudakov's material does not, of course, serve to prevent the USSR from learning American secrets. It rather serves to keep America uninformed about the fallacies of our fusion policies...

For a change, the Soviets did cooperate seriously. Rudakov gave us data declassified for the purpose of informing and helping us. We keep them secret because, as I said, these data expose U.S. nuclear policy as being self-defeating and incompetent. Professor Andrei Sakharov who understands the situation on both sides has warned the U.S. that it must activate and accelerate its nuclear programs, nearly all of which seem to be in disarray.

I'll skip a question about your knowledge on Soviet charged particle beam weapons. This news emerged one year ago and, meanwhile, has been artfully confined to the memory hole. The particle beam technology is interrelated with the fusion technologies we have been discussing. If and when the USSR perfects the charged particle beam weapons, the U.S. may be suddenly and effectively disarmed.

Question 6: Did you hear that Nobel Prize Laureate Nikolai Basov, a top Soviet scientist and also member of the Supreme Soviet, disclosed — early in November 1977 at Fort Lauderdale, Florida — that in the Lebedev Institute of Physics the breakeven boundary of power generation by fusion was crossed? This means that the scientific and economic feasibility of fusion power may have been proved experimentally. The Lawson criterion, which defines the magic number, was exceeded by a factor of more than five. Did you hear about this Soviet claim? (No one had heard about it.)

The Soviets can be proud of their pioneering achievement. Their accomplishment could be to our benefit for the simple reason that we need more energy than any other society. The Administration's sour silence is deplorable and shameful.

The Lebedev accomplishment is due to new theoretical knowledge which the Soviets have been giving us freely, thus accelerating our own program far beyond what the Carter, Ford and Nixon Administrations, all three, wished to concede...

Basov came to this country, not to buy himself a Brooks Brothers suit, or to admire the hotels of Miami Beach. He came on practical business: in order to proceed from the scientific accomplishment in the *laboratory*, lasers and other implements are needed to establish a fusion power *industry*. Lasers must be improved and be mass-produced. Cooperation on these tasks between the U.S. and USSR — and others — would very much accelerate the coming of commercial fusion power throughout the world.

Basov came to propose such cooperation. Shooting from the hip with a dead bullet, we turned him down cold and President Carter may not even know about it. If such cooperation is inadvisable — why? — should this determination not be discussed by Congress? This matter, which can be explored at leisure, is too serious to be left to arbitrary judgements.

Washington sent our biggest magneto-hydro-dynamics generator to Moscow. We eliminated most of our own MHD program and, therefore, although we had built this top-technology generator for the U.S. fusion program, we cannot use the equipment ourselves. Now the generator is incorporated in the Soviet fusion program. Washington does not really want Moscow to reciprocate; and it does not by any means wish to accelerate fusion.

Basov would have been a most honored guest if he had carried bad tidings about the feasibility of fusion power. But he told us it *does* work...

The press was told that U.S. scientists don't agree with Basov's data... But is this skepticism a reason for the press not to report about Basov's sensational disclosures which by themselves — whether entirely correct or not — are news of the most "newsy" kind? *Not* to reprint Basov's speech and not to tell about his offer for genuine cooperation either suggests censorship or poor journalism.

Still, a four-paragraph story was printed in *Science News* (November 27, 1977). The story implied doubts about Basov's competence, and his measurements which may not have been "computed in the same way as it is done in the U.S." Indeed, they were not, because the experiments were derived from a fundamentally dif-

ferent theory about plasmas. The story also created the impression that Basov — a physicist! — does not quite realize the importance of heat and temperature. Needless to say, he had commented on this factor himself. Meanwhile, our scientists seem to be adjusting the U.S. fusion program in prudent silence...

An interagency task force of U.S. government auditors reviewing the collection and accuracy of government statistics found that in the energy field the Administration is manipulating the numbers to serve its political purposes. The Office of Energy Information and Analysis is reported to have made 21 invalid or doubtful changes in the assumptions controlling computer programs designed to test energy policy options.

A "Fusiongate" beckons in the clouds, but it does not interest the press. Forever Watergate, is their motto. News which is unfit to print is preferred to news which the country needs for survival.

The American Revolution opened the road to constitutional government and human rights. Our form of government allowed the creation of a free economy; steady increases of productivity followed. Free speech became the cornerstone of technology which, largely through the free market of technology and capital, built the electric, petroleum, automobile, aviation, electronics, chemicals, etc. industries, improved health established ever more jobs, and provided constantly rising incomes (in inflated and real dollars).

When windmills constituted new technology they easily defeated Don Quixote, the champion of going obsolete. The fusion reactor will, predictably, eliminate the political magicians who still believe they are able to conjure away the overriding necessities of our age. We can only hope that in building such a reactor the U.S. will not trail too far behind the USSR.