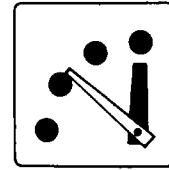


We Re-Set the Clock



SAMUEL H. DAY, JR.

For twenty-seven years the clock of the *Bulletin of the Atomic Scientists* has symbolized the threat of nuclear doomsday hovering over mankind. The minute hand, never far from midnight, has advanced and retreated with the ebb and flow of international power politics, registering basic changes in the level of the continuing danger in which people have lived since the dawn of the nuclear age.

Two years ago the minute hand was pulled back to 12 minutes to midnight as a consequence of the signing of the first arms control agreements which emerged from the Strategic Arms Limitation Talks between the United States and Soviet Union. This was an event which seemed to usher in a new era of sanity in superpower nuclear arms policies. In recognition that our hopes for an awakening of sanity were premature and that the danger of nuclear doomsday is measurably greater today than it was in 1972, we now move the clock forward to 9 minutes to midnight.

We do not thereby venture a prediction as to when, or even whether, a nuclear holocaust may come, or to imply that the likelihood of its occurrence can somehow be closely calibrated. We offer instead an assessment and a warning. Our assessment is that in these past two years, and in particular these past few months, the international nuclear arms race has gathered momentum and is now more than ever beyond control. Our warning is that so long as control continues to

elude us civilization faces a growing risk of catastrophe.

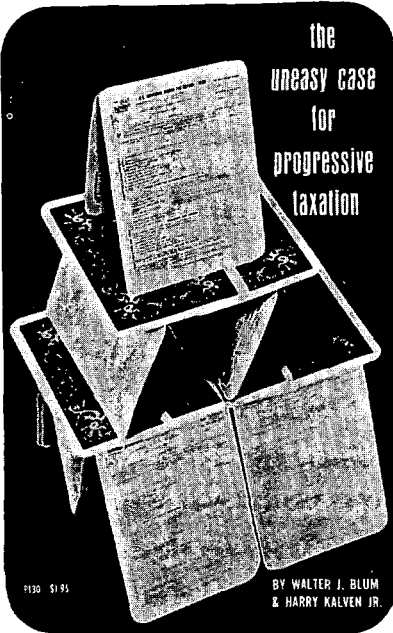
Despite the promise of the 1972 accords, it is now apparent that the two nuclear superpowers are nowhere near significant agreement on strategic arms limitations. The failure was manifest at the recently concluded summit conference in Moscow. This in itself is cause for concern in view of the arms buildup which has continued during the course of the negotiations, and particularly since 1972. In anticipation of limitations agreements that have never come to pass or were of little consequence, more and more weapons have been built and tested, and more and more weapons systems have been developed and deployed. Far from restraining the forces which it was intended to curb, SALT has sustained and nourished them, providing acceptable channels for conducting business as usual.

This subtle undermining of mankind's hopes for a saner world has been aptly characterized by Alva Myrdal, the former Swedish representative to the U.N. disarmament talks at Geneva and at the United Nations: "The so-called 'disarmament agreements' that we have obtained are either nonarmament agreements or mere cosmetic devices. They have been used to stall for time, and to make people believe that something has been achieved."

Thus we find that the United States today, while talking peace, is developing new generations of nuclear weapons and delivery systems,

each more terrifying, more efficient and more lethal than the last, and that the situation in the Soviet Union is much the same. We find policy-makers on both sides increasingly ensnared, frustrated and neutralized by domestic forces having a vested interest in the amassing of strategic inventories. The worldwide arsenal of nuclear warheads continues its astronomical upward spiral. It ranges from hydrogen bombs capable of destroying great cities at a single blow to artillery shells with yields so indistinguishable from those of conventional explosives that their use would blur the distinction between nuclear and non-nuclear hostilities. We find, with the passage of time, a growing tendency to conventionalize the concept of resort to nuclear arms in contingency plans for war, both in the United States and the Soviet Union, as well as in other powers which have achieved nuclear weapons capability. The 'narcoticizing' of policy-makers, and the public itself, to the implications of nuclear armaments is a source of growing peril to the world.

To these threats from the established nuclear powers we must now add the new threat of continued proliferation of the nuclear powers themselves. India's explosion of a nuclear device in May further broadened the geographical and political base for nuclear weaponry. It loosened another restraint on nuclear weapons development and raised anew the spectre of the spread of nuclear arms to other governments and regions. India's decision to join the 'nuclear club' may have set in motion a train of reaction which could greatly en-



THE UNEASY CASE FOR PROGRESSIVE TAXATION

Walter J. Blum
and
Harry Kalven, Jr.

Taxation and justice has resurfaced as a vital point of debate on national policy. The structure and merits of progressive income tax, examined in this book, are the core of any such discussion. Lawyers, economists, and those concerned with the ethics of public policy will be interested in *The Uneasy Case for Progressive Taxation*.

"A carefully documented, closely reasoned, highly readable discussion of one of the most difficult problems of our troubled times. It needed to be written, and it needs to be widely read." — *Harvard Law Review*

"The authors take a politically explosive subject and with scholarly detachment dissect the issues, pin down the inconsistencies, balance the arguments scrupulously, and finally leave the reader to make up his own mind." — *London Financial Times*

1963 viii, 107 pages Paper \$1.95

The University
of
Chicago Press

60637

hance the chances of a local dispute igniting a nuclear conflagration.

Whether nuclear fission is put to peaceful or warlike use depends as much on the intentions of the user as on the nature of the technology. That is why the prospective introduction of nuclear reactors into the volatile Middle East, announced in June by the United States, must be viewed with misgivings. Although the need of that area for greater economic development is undeniable, the introduction of a technology having nuclear weapons potential (however iron-clad the safeguards may be said to be) will remain fraught with danger until a greater measure of political stability has been achieved.

Indeed, the adaptability of nuclear fuels for use as weapons poses a growing danger to all peoples in these times of increasing reliance on nuclear energy to meet the power demands of industrial societies that are increasingly vulnerable to the disruptive acts of desperate individuals and organizations. The nuclear trigger which threatens the lives of millions, if not the peace of the world, is no longer within the grasp of just a very few. The failure of governments to face this ugly fact constitutes another measure of the increasing danger in which we all live.

Taken together, these considerations impel the forward movement of the *Bulletin* clock.

The world must continue to live, as it has lived for a generation, with the atomic genie it let out of the bottle in 1945. Science and technology can do nothing to alter its awesome powers for good and ill. But we remain hopeful that society has within itself the collective wisdom to adapt its institutions for the successful accommodation of nuclear power. The record of governments to date is far from reassuring. But governments are the creatures of society, not its masters, and their shortcomings are not irremediable. It behooves us, as peoples of all nations, to look to the improvement of our imperfect institutions, to demand a higher level of performance and accountability from those who exercise power, and to remember, above all, that time is running out.

National Politics and International Technology

Nuclear Reactor Development in Western Europe

HENRY R. NAU

Nau traces the link between political interests and technological programs in an examination of national and cooperative efforts to develop nuclear power reactors in Western Europe. He presents four detailed case studies of government and industrial programs to develop various types of fission reactors. \$12.50

of related interest

International Safeguards and Nuclear Industry

edited by MASON
WILLRICH

"The increasing danger of diversion of nuclear materials from power production and other peaceful uses to weapons or other explosive devices, and the existing international safeguards to prevent it, are competently examined in this book." — *Foreign Affairs* \$11.50

The Politics of Nuclear Proliferation

GEORGE QUESTER

"This first-class piece of research, thinking, and writing offers a review of the status of world powers and would-be powers in their policies and attitudes toward the signing and ratifying of the Nuclear Non-Proliferation Treaty." — *Library Journal* \$11.50

Johns Hopkins

The Johns Hopkins University Press
Baltimore, Maryland 21218