
THE CLOCK RETREATS ONCE MORE

Originally set at seven minutes to midnight, the symbolic clock depicting the approach of mankind to nuclear doomsday has been exhibited on the cover of the Bulletin since June, 1947. It is not intended to reflect the momentary international situation but the trend of human society toward or away from a nuclear catastrophe.

In October, 1949, following the announcement that the USSR had achieved an atomic explosion, the hands of the clock were moved closer to doom, and stood at three minutes to midnight.

They were moved even closer in September, 1953, after the United States and USSR had exploded the immensely more destructive hydrogen bombs.

In January, 1960, the hands of the Bulletin clock were moved back five minutes to express the Bulletin's

belief that "a new cohesive force had entered the interplay of forces shaping the fate of mankind, and is making the future of man a little less foreboding..."

In October, 1963, the hands of the Bulletin clock were moved back to 12 minutes to midnight in response to the partial test-ban treaty.

In January, 1968, the hands of the clock were moved to seven minutes to midnight registering the "dismal record of the last five years," including the development of nuclear weapons by France and China.

Now, in April, 1969, the clock retreats once more, three minutes, to stand at ten minutes to midnight in response to the ratification of the Nuclear Non-proliferation Treaty by the U.S. Senate.

NPT: Movement Toward A Viable World

Ratification by the U.S. Senate of the Nuclear Non-proliferation Treaty suggests that the movement toward a viable world is still going on, however slowly, despite the loud alarms and violent excursions of hot and cold wars all over the globe. The deadlocked Vietnam conflict, the occupation of Czechoslovakia, General de Gaulle's monumental self-centeredness, and Mao Tse-tung's obsessive self-righteousness have not prevented the signing of a treaty by which 100 nations have renounced historical reliance on their own military power, and the United States and the Soviet Union have promised to start reducing theirs.

This treaty reasserts the common interests of all signatories in avoiding new instabilities, bound to be introduced into the precarious balance of nuclear terror with the emergence of new nuclear nations.

True, the importance of the treaty is mostly symbolic. It will not prevent a nation now having nuclear weapons from increasing their number or enhancing their destructiveness. It will not prevent some nations, not now having nuclear weapons, from making them if they should decide that their national survival depends on them. India, Israel, Egypt, even West Germany may yet arrive at such a conclu-

sion—although prevention of acquisition of nuclear weapons by West Germany has been the main reason for the Soviet Union's support of the treaty.

The great powers have made a first step. They must proceed without delay to the next one—the dismantling, gradually, of their own oversize military establishments. Otherwise the hope raised by the treaty will prove futile.

The treaty has cleared the way for future, more substantial steps on mankind's painful path towards security in a nuclear age. This security cannot be based on a competitive rush towards more and more apocalyptic weapons systems. Its only realistic foundation lies in all nations recognizing that their political and ideological self-interests must be subordinated in the future to mankind's common concern with survival. E.R.

AGRICULTURAL DEVELOPMENT IN AFRICA

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In spite of the definite advantages of regional institutions for tackling common problems, it was concluded, after much discussion, that in practice the amount of research which lends itself to regional institutionalization is limited, and the greater part must be oriented towards solution of national problems. A less formal type of organization could prove equally useful and often more successful, especially where natural phenomena or diseases extend across frontiers.

As much as possible the activities of national and regional research organizations should be closely associated with those of the universities.

Indeed, it is desirable to establish national or regional agricultural research authorities in which all these interests are represented. The functions of such authorities should include the coordination and direction of overall agricultural research in the country or region. Such authorities should have financial standing so that they can generously assist both the universities and the research institutions to play a fuller role in agreed research programs. They should also encourage the universities and the research institutions to establish and maintain close liaison with institutions outside of Africa which are engaged in work relating to problems of tropical crops and agriculture.