

Nine minutes to midnight

JUNE 11, 1998—THE *BULLETIN OF THE ATOMIC SCIENTISTS* has moved the minute hand of the “Doomsday Clock,” its symbol of nuclear peril, five minutes closer to midnight.

Yesterday it stood at 14 minutes to midnight. Today, it stands at nine.

The *Bulletin’s* Board of Directors moves the hand not only in response to the addition of two more states as declared nuclear powers, but also to dramatize the failure of world diplomacy in the nuclear sphere; the increased danger that the nonproliferation regime might ultimately collapse; and the fact that deep reductions in the numbers of nuclear weapons, which seemed possible at the start of the decade, have not been realized.

The movement of the minute hand follows the unfortunate May tests of nuclear devices by India and Pakistan. The consequences of a possible nuclear exchange between India

and Pakistan are unforeseeable. But if barriers to the use of nuclear weapons ever fail, the physical, economic, and psychological security of every person on the planet will be threatened.

But the heightened sense of peril has roots that extend far beyond the Indian and Pakistani tests. The tests are a symptom of the failure of the international community to fully commit itself to control the spread of nuclear weapons—and to work toward substantial reductions in the numbers of these weapons.

The end of the Cold War gave the world a unique opportunity to control and reduce the threat of nuclear catastrophe. It is clear that much of that opportunity has been squandered.

Seven years ago, the nuclear face-off between the Soviet Union and the United States had ended. The two superpowers had signed a major strategic arms reduction treaty. The Soviet Union itself had collapsed and a new democratic Russia seemed about to be born. The United States had begun to cut back military spending and the United Nations seemed poised to become a more effective force for peace.

In that flush of optimism, the *Bulletin* in 1991 moved the minute hand of the clock “off the scale”—to 17 minutes to midnight. The *Bulletin* hoped to call attention to a breathing space that the world had not enjoyed since the Cold War began.

By 1995, that optimism had faded. East-West nuclear arms reductions had stalled and U.N. peacekeeping efforts had not proven effective. The *Bulletin*, suggesting that “opportunities have been missed and open doors closed,” moved its clock closer to midnight—to 14 minutes.

But even in 1995 there were



Board Chairman Leonard Rieser resets the hands of the clock.

CHICAGO SUN TIMES

grounds for optimism. The Nuclear Non-Proliferation Treaty, in effect since 1970, had been made permanent. And a Comprehensive Test Ban Treaty, an idea proposed decades earlier, seemed likely. In fact, a test-ban treaty was concluded in 1996, and 149 nations—not including India and Pakistan—have signed it.

The nonproliferation treaty commits the established nuclear weapon states to “pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.”

Although the East-West nuclear arms race is clearly over, no nuclear state is moving significantly toward nuclear disarmament. Between them, Russia and the United States still have upwards of 30,000 nuclear weapons—strategic and tactical—in various states of readiness. Nine years after the fall of the Berlin Wall, the United States and Russia collectively have some 7,000 warheads ready to be fired with less than 15 minutes notice.

Meanwhile, only 13 nations have ratified the test-ban treaty. Of the established nuclear weapon states, only Britain and France have ratified it. Neither the United States Senate nor the Russian Duma has acted. We urge the Senate to consider the treaty this year.

The *Bulletin's* clock has appeared on every cover since June 1947, and it is meant to symbolize the possibility of nuclear catastrophe.

Today we move the minute hand five minutes closer to midnight. Only once before have we moved the hand forward so many minutes. That was in 1968, after France and China had joined the nuclear club, and as wars raged in the Middle East, South Asia, and Vietnam.

In the words of the late Eugene Rabinowitch, one of the *Bulletin's* founding editors: “The *Bulletin's* clock is not a gauge to register the ups and downs of the international power struggle; it is intended to reflect basic changes in the level of continuous danger in which mankind lives in the nuclear age, and will continue living, until society adjusts its basic attitudes and institutions.” ■

Spreading the news on the net

ON JUNE 11, AS BOARD CHAIRMAN Leonard Rieser announced the new setting of the Domsday Clock before a bank of print, radio, and TV reporters in a posh hotel on Chicago's Michigan Avenue, a lone *Bulletin* editor sat in a closet-size room and broadcast the news to the world with a single keystroke. For the first time, the movement of the minute hand was simultaneously announced at a press conference and on the *Bulletin's* web site (www.bullatom.sci.org). The move plugged the *Bulletin* Online into the network of news sites that have exploded across the Internet in recent years.

Some web watchers came directly to the *Bulletin* after learning of the clock change, but far more were directed to the site by links from other web sites. The *Bulletin* was the top story on CNN Interactive throughout the day, which brought a flood of web users. So did an all-caps headline—“DOOMSDAY CLOCK TO CHANGE”—on the Drudge Report, a heavily trafficked news/rumor/gossip site. For a while, the *Bulletin* also had main-page coverage on ABCNews.com,

until an item about the history of the Barbie doll bumped it into the nether regions of ABC's cyber-kingdom.

Visitors to the *Bulletin* Online were asked to offer their opinions about the new setting by responding to the Domsday Clock poll; more than 500 people did so on the day of the announcement. Responses ranged from thoughtful analyses of the state of the world—fears raised by the South Asian nuclear tests, disappointment over the lack of real progress in arms control—to millennialist rants that drew heavily on Nostradamus and the Book of Revelations (ah, the diversity of the web!).

When the dust settled, the *Bulletin* Online had logged almost 40,000 visits on June 11 alone (an average day sees 700–800). Readers checked out the Board statement (reprinted above), perused a history of the Domsday Clock, responded to the poll, requested a free issue of the magazine, and



www.bullatomsci.org

searched the archive for a better understanding of the events that drove the decision to move the minute hand.

While the web site has quieted down somewhat since the frenzy of June 11, regular daily traffic has seen a definite up-tick. Arms control and security issues may never be able to compete with Barbie for attention, but it seems that the *Bulletin* Online is finding its way on to more and more Internet bookmark lists.

—Brendan Mathews