

There Must Be an End to It

THIS is Nuclear Weapons Season. The Soviet Union has already at least seven tests of nuclear weapons to its credit; the United States will have a new series of tests from the middle of this month to the beginning of September; and, within the next few months, Britain will find out how powerful its H-bomb is. This is also the season when the protests against nuclear weapons have been forceful as never before. Albert Schweitzer has spoken; so have the leading German atomic scientists, and, through official and unofficial channels, the people of Japan. Atomic scientists or geneticists may disagree among themselves about the amount of man-made radiation a human being can safely absorb. But the Japanese have some valid reasons for thinking they have been exposed well beyond the tolerable limit.

The article that follows is a case study of some of the happenings in Nevada and neighboring Utah as a result of the continental tests the Atomic Energy Commission has been conducting since 1951. During some of the testing periods, particularly that of 1953, life was quite rough for several thousand citizens of those two states. It was rough on the AEC too, and particularly on the men it sent into and around the test site. These men did not know—in fact, could not know—a great deal of what they needed to know about the vagaries of winds and fallout. It was partly because adequate knowledge was not available that the Nevada tests were decided on, and competent men were stationed there to keep a check on the results. These men frequently blundered. More than once the measures they took to forewarn the people of the area about the dangers of radiation proved inadequate. Yet, for all their blunders and their inadequacies, these public servants deserve only compassion.

Of course it is not for laymen to judge whether, or to what extent, the Nevada tests brought enlarged knowledge of low-yield atomic weapons. Our ignorance and our curiosity are well protected by the government's policy of classifying what may be beyond the reach of our understanding anyway. But the case of

the Nevada tests proves that the AEC has frequently used the strictures of the security regulations to cover up its failures to give adequate protection or warning to a sizable number of people in the region. We like to assume that the intentions of the AEC and its men in Nevada have always been of the best, and that the AEC had no responsibility for the harm that some people allege they suffered. But for the many little acts of uncandor in covering up probably inevitable miscalculations, for a tendency to gloss over with public-relations blandishments the evidence of its failures—for this the AEC must be held accountable. An all-powerful government agency too frequently is tempted to use the cloak of secrecy to shield the ignorance rather than the knowledge of the men in the know.

The Atom Rush

Yet once more we should be compassionate in passing judgment on the behavior of the men working for the AEC, from the highest to the lowest. The cloak of secrecy they wear must be excruciatingly heavy, for it imposes on these unfortunate men—particularly those at the top—too great a burden both of certainty and of doubt. Perhaps no one who has had the secret of the atom entrusted to him by his own genius or by chance of official appointment, has escaped being, somehow, marked for life.

The technicalities of atomic science must be the least oppressive part of the burden. At present, knowledge of the atom, its promises and threats, is becoming only too accessible. Atomic secrecy—even of the most advanced kind—has a built-in time limit. This consideration cannot contribute to make life particularly easy for the custodians of our nation's atomic secrets. Moreover these men, whose powers within their own agency are frighteningly unchecked, can scarcely resist formidable pressure from outside.

War and peace seem equally hell-bent on going the atomic way. Our government is supposed to be producing—and of course testing—the biggest and most

powerful weapons of massive retaliation, together with the tiniest pocket-sized bullets or missiles. We hear about atom-powered surface vessels, airplanes, and motor cars—and the appalling part of the story is that within a few years most of these gadgets will be with us. The AEC may or may not deserve to be criticized for not having pushed hard enough the development of atomic power at home and abroad. But certainly no authoritative scientist denies that, as of now, atomic reactors are rather hazardous things. Actually, until the time comes when atomic reactors are safer, and a way is found for the harmless disposal of atomic waste, those men may be correct who say that the peaceful atom is at least as dangerous to the human race as the weapons tests.

We of our generation have a vivid picture in our minds of the Gold Rush as something full of color, and adventure and rowdiness. But if the Atom Rush is not slowed down somehow, then only a negligible number of human beings in negligible lands may live to have a dim memory of it.

IF THE ATOM is such a danger to humanity—a danger that makes the prospect of any gain from it somewhat ludicrous—then we may ask, Why so much secrecy? Why don't the hapless men responsible for our atomic program speak more frankly, more candidly, so that the atom may, in all truth, be tamed and made to work for peace?

Never, perhaps, has the opportunity been as great as it is now, for never has the danger been so obvious and so vigorously denounced by so many different people at the same time. The major threat, of course, is not in a runaway program of Atoms for Peace. Rather, it is in the fact that, as Britain has shown, the American New Look on atomic armament has proved contagious.

If the sovereignty of a nation is to be real, it must be guaranteed and testified to by that nation's capacity to produce—for defense and offense—nuclear weapons of its own. This is just about what the British White Paper said. As the destructive power of nuclear weapons—no matter whether of the A- or H- variety—is pretty well known, the practical peacetime evidence of sovereignty is the capacity to produce an atomic test. Britain, at the very moment it acknowledges that it can no longer be counted as a major nation, puts its reliance for its own defense on nuclear weapons, and—mutation or no mutation, Japan or no Japan—stubbornly sticks to its decision to test its first hydrogen bomb.

There was a time when many of us honestly believed that our country could keep for an indefinite number of years what we thought was the absolute secret of the atom bomb. With a flattery somewhat unbecoming his true greatness, Winston Churchill repeatedly told us that in our monopoly lay the only guarantee of peace. Then came the second phase, when Russia acquired the secret of the atom bomb, and proved it with its own

tests. We are now in a third phase, and Britain, with its armament programs and its tests, is showing the way to other nations. There are nearly a hundred nations in the world, each claiming sovereignty.

In the Fourth Dimension

Perhaps we needed to reach this point, this particular turn in history, when the vista of what the future might have for us is so clear—though by no means irrevocable—and seen by so many. The more nations have atomic weapons of their own, the more tests there will be. The more nations place reliance on fission or fusion weapons, the greater the chance that the detonation of the first atomic weapon—not in a test but in earnest—will be followed by much louder ones.

In fact, all nuclear-weapons tests, no matter how tiny the weapon, are acts of hostility against mankind. For practical purposes and in order to reach some standstill agreement with Soviet Russia before too many other nations go atomic, we may distinguish between H- and A-weapons, strategic and tactical, or dirty and clean bombs. But the difference is of quantity rather than of quality; for every atomic explosion, no matter how controlled and clean, produces results that go beyond the reaches of space and of time. This weapon, for which Einstein provided the formula, truly operates in the fourth dimension. The rays and the particles it releases, even when the detonation is only for testing purposes, are brought by the winds and by the rotation of the earth well beyond the boundaries of the nation that has exploded it. The same rays and particles keep showing up at later times, their power of destruction frequently multiplied.

The little that can be known about the atomic tests in Nevada makes an oppressive, nightmarish story. Yet we can be sure that they were the best, the most responsibly supervised tests ever. No evil men were involved. The thing itself is evil.

THE REMEDY? Of course there is a remedy. An old man in Equatorial Africa has said the word. The leading German scientists have said the same word. The word is NO. No co-operation on the part of any man who can deny his skill—not to speak of his enthusiasm—to this insane, unending race. No co-operation on the part of anyone who may have acquired even a microscopic fragment of truth and does not, by keeping silent, want to trade it in for a share of guilt.

Our national leaders have fallen into a rather trying mannerism: They never speak of liberty without saying the blessings of liberty. They should know that liberty is seldom a blessing. When it is exercised at its best, it can be a great and risky load. There are enough men with a passion for liberty everywhere—in the United States, in Equatorial Africa, in Germany, in Japan, maybe even in Soviet Russia—men courageous enough to bring this mad business to an end.



Clouds from Nevada

A Special Report on the AEC's Weapons-Testing Program

PAUL JACOBS

WITHIN a few days the detonation of a nuclear weapon will begin Operation Plumbbob, the new series of tests that is being conducted this spring and summer by the Atomic Energy Commission at its Nevada test site.

When that first "device" is detonated from the control point, midway between Frenchman and Yucca Flats ninety miles northwest of Las Vegas, there will be a blinding flash of light, a great bang, and a shaking of the earth. In the days following there will be more detonations. The seven-hundred-foot tower on which one of the devices is mounted will disappear as a huge cloud rises and forms the now familiar mushroom shape.

THESE are no longer novel sounds and sights to the people living in Nevada and Utah near the test site.

Those gathered around the crap tables of Las Vegas will hardly break off from their concentration on "making the hard four" to connect the sound or flash with its cause. But others, when they see or hear the explosion, will be filled with apprehension and dread; justifiably or not, they regard the Atomic Energy Commission as an army of occupation.

At the Fallini ranch, near Warm Springs, Nevada, about a hundred miles north of the test site, a somber group of children and adults will see the flash of light and bitterly recall that all through the spring of 1955 little Martin Bardoli, then seven years old, had waited excitedly on test days—along with six other children, all going to school at the ranch, and about a dozen adults—for the mushroom clouds to appear. Martin, a tow-headed kid

everybody called "Butch," died last year of leukemia in a Reno hospital.

His mother, Martha Bardoli, says, "I think my Butch died because of the tests." And after the boy's death, one of the doctors who attended him stated that it "may have resulted from the atomic explosions in southern Nevada." At that time and now, the Atomic Energy Commission emphatically ruled out that possibility. Although the AEC has stated that leukemia can be induced only by much larger doses of radiation than Martin could have received, the fact is that the AEC does not know exactly how much radiation exposure "Butch" Bardoli received as a result of radioactive fallout from its weapon-testing programs.

Nearly thirty miles east of the Fallini ranch, in the middle of a desolate valley close to the Grant mountain range, is Nyala, Nevada.