

Coming to a head

Last week, as the controversy over deployment of an antimissile system boiled over and the President said he needed more time to decide what to do about it, the arguments on both sides were the same as they had been for a year.

But the situation was different. A year ago the nation had been preoccupied with the war in Vietnam. Now, with talks at least taking place in Paris, opponents of the ABM could concentrate on what they regard as an escalation in the nuclear arms race.

If President Nixon decides to continue last fall's halt in the deployment of the Sentinel ABM—he had promised a decision early in the week, then deferred it—he will be heeding the advice of all four former Presidential Science Advisers, as well as both Republican and Democratic leaders in Congress and a number of cities which have literally kicked the ABM out of their own back yards.

Most scientists have grave doubts about deploying the Sentinel system now, as they have had for many years. As Jerome B. Wiesner, MIT provost and adviser to Presidents Kennedy and Johnson has declared, many believe it just won't work.

And Dr. Hans Bethe, Nobel-winning physicist who has catalogued the many technical defects of the system, reiterated his doubts that it could be effective even against Chinese missiles.

Through the use of decoys to fool the defensive missiles, or chaff or high-altitude explosions to blank out their radar, even a primitive Chinese ballistic missile could penetrate the Sentinel shield, Dr. Bethe wrote a year ago (SN: 3/23/68, p. 279).

Those arguments hold equally true today, he says.

Wiesner and two former Eisenhower advisers believe that building any ABM system would lead to arms escalation.

The decision to build the Sentinel ABM was announced by former Secretary of Defense Robert McNamara in September 1967, after years of decisions to defer earlier systems. McNamara chose a relatively light system oriented to protect the U.S. against Chinese missiles expected to be operational in the mid-1970's. This is the so-called thin system, then estimated to cost about \$5 billion compared to the thick system that would cost from \$40 billion to \$60 billion.

McNamara, in effect, set forth very good reasons for not deploying the Sentinel system, then bent under heavy Congressional pressure and advocated building it anyway.

Now, with the shoe on the other foot, and Congress becoming the focus for opposition, a McNamara successor, Secretary Melvin R. Laird, is leading the forces for deployment as he once did from Capitol Hill.

The most often used argument in favor of Sentinel is that all it costs is money, of little consequence if lives can be saved. For a thin system the estimated number of lives saved in the event of attack range from 20 million to 40 million, while the thick system ranges from 80 million to 120 million.

The consensus of scientists is that any proposed ABM system nourishes the illusion that an effective defense against ballistic missiles is possible.

An ABM is "not an ultimate weapon but an ultimate absurdity," Dr. George Kistiakowsky, former President Dwight D. Eisenhower's science adviser, told the Senate Subcommittee on International Organization and Disarmament.

His view is also supported by Dr. Donald Hornig, President Johnson's science adviser, who terms the thin deployment a "downpayment on a continuing system." He says he advised against the McNamara deployment move at the time.

All of the scientists testifying at the Senate hearings and at those of the House Foreign Affairs Subcommittee

agreed that a delay of a year or more in deploying the Sentinel would not jeopardize the security of the United States. Most doubted it should ever be built.

Dr. James R. Killian, chairman of the board of Massachusetts Institute of Technology and also a former Eisenhower science adviser, urged that the best way for the U.S. to determine its position on deployment of Sentinel is to establish a national commission that will investigate "all strategic weapons."

Members, Dr. Killian proposed, should serve full-time for several months, and be free from the vested interests that constitute the military-industrial complex that pressed President Kennedy so hard to deploy a Sentinel precursor, the more limited Nike Zeus.

Dr. Herbert York, director of research and engineering in Eisenhower's Defense Department, and now professor of physics at the University of California in San Diego, agreed with Dr. Kistiakowsky that the Sentinel ABM offers a false hope. He charged it is an extremely dangerous alternative if it diverts attention from the real goal: A solution of armaments problems in the only place it can be found—a political search for peace combined with disarmament measures.

EARTHQUAKES

More than prayer



Samuel M. Sharkey

Alaska quake caused hillside to slide out from under a suburb of Anchorage.

Earthquakes are an ancient human terror that has so far resisted human technology. Fire can be contained and extinguished and floods controlled. But about all that can be done to prevent earthquakes, now as in the 16th century, when Archbishop Thomas Cranmer wrote, ". . . from earthquake, fire, and flood . . . Good Lord, deliver us." is to pray. Unlike storms, floods or forest fires, earthquakes give no warn-

ings. For those affected there are neither shelters nor evacuation to safe ground.

"We have as yet no means of forecasting damaging earthquakes," says the Committee on the Alaska Earthquake of the National Research Council. "Currently promising research involves careful measurement of ground movements and associated changes in local magnetic, electrical and gravity fields; studies of earthquake origin and mecha-