METEOROLOGY

No A-Bomb Weather Effect

➤ DR. VINCENT J. SCHAEFER, the original cloud seeder and rain maker, told SCIENCE SERVICE that he doubted very much whether the debris from an A-bomb explosion had anything to do with the recent series of tornadoes.

"From what I know about these explosions," he said, "I doubt if they could produce material which would make very good rain-making material. Silver iodide is the best, and I doubt if there were a lot of things as good as silver iodide."

Dr. Schaefer pointed out that the explosions kicked up some dust which is one of nature's instruments for making rain storms.

"But," he said, "the dust in an ordinary dust storm is so very much greater in amount than the little bit kicked up by an A-bomb explosion that I cannot see how the bomb's dust could have any effect on general weather conditions."

Weather Bureau experts point out that a tornado is only a relatively small by-product, in terms of energy, of general stormy conditions which spread over several states. The Michigan and Ohio tornadoes, for instance, were offspring of the stormy conditions over the Great Lakes states. When these conditions moved eastward, they spawned the tornado which took so many lives in Worcester, Mass.

This general stormy condition releases energy equal to many hundreds of thousands of A-bombs, they point out, and it is the product of even greater forces at work in our atmosphere over the entire northern hemisphere. A tornado itself, destructive as it can be, is a relatively puny thing, even beside an A-bomb. Averaging about 100 yards wide, about a mile high and traveling about 15 miles, it has energy only two to three percent of that of an A-bomb.

One thunderstorm is much more powerful, equal to about 50 A-bombs. Thunderstorms and hail storms are also products of such general stormy conditions as produced the recent tornadoes.

Finally, the meteorologists say, similar A-bomb tests at a similar time last year were accompanied by only an average number of tornadoes.

Having heard so much about rain making and the claims of being able to change the weather with a few pounds of silver iodide sprayed into the air, people very naturally believe that an A-bomb explosion might be connected with a tornado. Yet it would seem that an A-bomb does not produce the kinds of material which, according to the rain makers, could influence the weather, and that the forces responsible for the tornadoes are in fact many times more powerful than man's puny efforts with the atom.

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At *jet engine* operating temperatures, ordinary steel burns like paper.