

INITIAL REPORT BY SIR JAMES CHADWICK

The implosion "gadget", containing 6 kg. of 49, was fired this morning at 5:30 a.m. Mountain War Time. The test appears to have been completely successful. There is no doubt that the nuclear reaction took place but so far I have no experimental estimate of the efficiency of the reaction. The ball of fire was intensely bright, equivalent to several suns by general estimate, so that it seems reasonably certain that the explosion was equivalent to more than 1000 tons of T.N.T. and possibly several thousand. This I call completely successful.

It was a wonderful, even fantastic, experience which I shall not attempt to describe now, as I am rather tired and should get things in wrong proportion.

I am sending you this news through General Groves, who has kindly offered to convey it to you. He is leaving immediately for Washington while I am staying on for a day or so.

I hope in an hour or two to get a rough estimate of the amount of the explosion.

A provisional and very rough estimate now is that the explosion was equivalent to about 10,000 to 15,000 tons of T.N.T.

It is unlikely that any publicity will arise. The event is being explained as the unforeseen explosion of an ammunition magazine on the air base. There was no damage either to persons or to property.

July 16th, 1945