

Did Mr. Callaghan

acknowledge these

papers?

THE SHOOTING BOX,
BURNHAM THORPE,
KINGS LYNN,
NORFOLK.
BURNHAM MARKET 359

2

(Weekend Box)

No.

PERSONAL & CONFIDENTIAL

Prints 3/5

Prime Minister

Lord Zuckerman advised
to send you this material.
24th August, 1979

The Rt Hon. Mrs. M. Thatcher, MP,
No. 10 Downing Street,
London SW1.

BM
30/8

Dear Prime Minister,

RM.

I enclose,

1. The report on "The Effects of Nuclear War" recently prepared for the US Senate Committee on Foreign Relations by a special staff set up by the US Office of Technology Assessment. It appeared in May of this year.

2. A report on "The Economic and Social Consequences of Nuclear Attacks on the United States", also published this year, which was prepared by another group for the Joint Committee on Defense Production: Congress of the United States.

Both these studies have made full use of previous studies made on behalf of the US Government on the subjects concerned.

I have sidelined and underlined various passages in both these reports. The first uses as its unit measure of destruction the effects of a single one-megaton strike on Detroit. Page 35 summarises the results. Page 37 summarises those of a single 25-megaton air-burst on the same city. Corresponding analyses were done on one-megaton and 9-megaton air-bursts on Leningrad, with the results summarised on page 39. A general summary of all the studies is set out on pages 3 to 12.

In effect, what this report indicates is that if not one, but a small number of cities in the United States were attacked, the results would be indescribable and almost certainly unmanageable. As the report says on page 3, a large-scale nuclear exchange would be "a calamity unprecedented in human history".

The major findings of the second study are set out in its opening paragraph. The table which I have marked on page 24 indicates the number of millions who would be killed in attacks of different intensities levelled at targets in the USSR. A corresponding table for the United States is to be found on page 11. See also Table 4, p.9.

.../...

If anything, both these reports under-estimate what the effects would be, given that attacks were delivered simultaneously on several targets. Studies which we ourselves made taking a series of targets in the Lenin-grad complex showed that the destruction of one target has a 'knock-on' effect on the next target. We also carried out more detailed studies of the effects of a one-megaton strike on Birmingham and Carlisle, the latter being chosen as being representative of what would be a 'tactical target' given a nuclear war on the European continent. I attach photocopies of some pages which summarise the results. (These are marked 3).

An article by McGeorge Bundy in a recent issue of International Security to the title 'Maintaining Stable Deterrence', of which I also enclose a photocopy (marked 4), indicates on page 13^{the} the levels of nuclear armament left on both sides, given the ratification of SALT II, would be more than sufficient to devastate utterly both the North American continent and the USSR. (See also p vj - opening para. (2))

A United Nations report prepared for the Secretary General in 1968 by an international group (I was the UK representative), and of which I also enclose a copy (marked 5), led to the same general conclusions as those set out in enclosures 1 and 2.

Quite apart from the technical difficulties of devising defence systems against ballistic missiles, a matter which was at the heart of the ABM debates which led up to SALT I (and so to the agreement not to 'destabilise' the state of mutual deterrence by deploying any such systems), it is a fact that it would be cheaper to outwit any such system than it would be to devise one. In the final analysis, an ABM system could be drenched and so nullified. There has been talk of particle-beam weapons which could defeat ballistic missiles, but the best informed physicists not only hold that a practicable defence using accelerators to emit intense beams of charged or neutral particles could not be devised, but that it would also be highly vulnerable to counter-measures.

All this is relevant to the proposition that the state of mutual deterrence should not be destabilised, the implication being that were this to happen one side or the other might, whether by rational judgment or as a mad action, launch a first-strike. At the present moment there is a lot of debate in the United States about the vulnerability of the Minuteman force, and indications that, in order to secure Senate approval for the SALT II

.../...

Treaty, President Carter may authorise the expenditure of some billions of dollars on what is called the MX System. But, as McGeorge Bundy says on page 13 of his article, even if the Minuteman force were neutralised, the USA would still have enough of a strike force in the other two elements of its Triad of strategic missiles (submarine-launched missiles and the bomber force) to destroy utterly 200 Soviet cities. (McGeorge Bundy was, of course, deeply involved with President Kennedy at the time of the Cuban crisis, to which he refers on page 8.) Nonetheless, there is talk of arranging the command and control machinery to allow of a proportion of the Minuteman force to be launched 'on warning'. On page 14 McGeorge Bundy decries any such move, which has been described by a present US official, who was involved in building up his country's strategic forces, as "the ultimate absurdity". As he put it, "in the United States the power to decide whether or not doomsday has arrived is in the process of passing from statesmen and politicians to lower-level officers and technicians and, eventually, to machines. Presumably the same thing is happening in the Soviet Union."

(Enclosure
4)

My own view is that no power on earth is going to push the nuclear genie back into the bottle. We have to live with the fact that nuclear weapons exist, and that their destructive power is such, that were they to be used on any large scale, the advanced countries of the world could never recover from the consequences. As destructive power has increased with the nuclear arms-race, national security on both sides has decreased, and to this trend there is no technical solution. As Harold Brown, whom you know, has put it, "Those who have served as civilian officials in the Department of Defense at the level of Presidential appointment ... have recognized the severely limited utility of military power, and the great risks in its use, as well as the sad necessity of its possession ... (The) higher their position and, hence, their responsibility, the more they have come to the conclusion that we must seek national security through other than strictly military means ... and urgently."

I have re-read the copy sent me of the letter which Dickie Mountbatten wrote to you on 27th July. I do not think that he would demur at what I have said here about the need to maintain a stable state of strategic nuclear deterrence. What he fears (his paragraph 4) is that the use of tactical or theatre nuclear weapons might precipitate world nuclear war. I share this view. Any number of nuclear-weapons battle games in NATO Europe have been

.../...

played out and analysed, but I know of none (other than those in which it is assumed that the Russians will obligingly not respond with nuclear weapons if we use them) which does not lead to absolute military chaos as well as widespread destruction, millions of civilian deaths, and escalation.

The United Nations Report (5) deals with the matter on pages 15 to 19. Were NATO to deploy so-called neutron bombs, the conclusion would remain the same. For there is no reason to suppose that, if we went ahead with this weapon, the Russians, who also have it, would not do the same. It requires a degree of imagination which I certainly do not possess to suppose that nuclear weapons would ever be used in a land battle against 'targets of opportunity' as opposed to being fired in a pre-targetted fashion against, let us say, Hamburg, Luxemburg, Leningrad, or against airfields or military dumps. The SS-20 is a fearsome weapon but I cannot understand why it is assumed that it is something special, as opposed to being a new weapon that has come into being because of the inner momentum of the arms-race. The Russians could just as easily 'take out' Brussels, Liege, Cologne with an intercontinental missile system deployed deep in the USSR, in the same way as either NATO nuclear weapons or central strategic nuclear weapons could be used to eliminate pre-targetted military objectives in Warsaw Pact countries.

Because the NATO countries have been unable to build up their conventional forces, we have continued to delude ourselves with the idea that our numerical inferiority on the ground can be compensated for by means of nuclear weapons. This is why I said yesterday - no doubt in somewhat exaggerated terms - that this delusion has left Western Europe defenceless, a conclusion which also emerges from Michael Howard's article (a photocopy of which I enclose, marked 6) in an analysis somewhat different from ones that I have made (but which also lead to the same conclusion). The concept introduced by McNamara that Western security depends on our ability to meet aggression on any level - a concept which he defined as 'flexible response' - has never been given reality. We seem to have continued with the old trip-wire philosophy with which NATO started, but which makes many Europeans ask whether the Americans would ever invite their own destruction given that Russian forces intruded into NATO territory.

See p. 986

.../...

There is lots more that I could say, and I hope that I have not already given you too much to read. I am now trying to get an answer to your question about long-term genetic effects, and shall minute you again as soon as I have some reliable answers.

Tom
J. J.

P.S. I hope you won't mind my slowing
a copy of this letter to Dickie Rommeltten.
J.