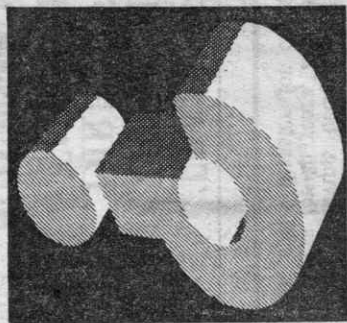


When the clock speaks along our main lines of defence



TERMS OF REFERENCE

Geoffrey Taylor

LEONID BREZHNEV had his detractors but it ought to be said in his favour that he did not launch a nuclear war when that was among his range of options. Indeed apart from invading Czechoslovakia and Afghanistan he lived out his days in relative peace.

It was all the more disturbing, therefore, that on the day after he died, and the more

civil defence inspector arrived to check our nuclear warning system. He was dissatisfied with what he found and ordered it to be replaced. Last week saw a further development concerning the air-raid siren to which I will come in a moment.

It should perhaps be explained that in rural areas the practice is for post offices, coastguard stations, or other public-spirited institutions to house the loudspeaker on which emergency messages can be relayed. We fall into that category along with about 11,000 others. The messages emanate (or would emanate, so far as we have not had to emanate so far) from the United Kingdom Warning and Monitoring Organisation, which is controlled by the Home Office and manned by the Royal Observer Corps.

The receiving apparatus is basically a voice-box and associated electronics, and the Mark II version is neater than the old. It's not relevant now but the old one had a high-frequency cut-out which interfered with my computer when I was transmitting messages along the phone line. We had to install a two-way switch to isolate the messages which

while transmissions were in progress.

This had two disadvantages. Isolation of the receiver, even for short periods, meant that we might miss an urgent message if it came. Indeed we sometimes forgot to reset the switch. Secondly it would not be possible to run a war and write for the newspaper simultaneously. The receiver has now been put on a separate circuit, so that in theory both can happen at the same time.

When the speaker is turned on and a test button pressed a series of blips will be heard to indicate that all is well. In an emergency the receiver would be on all the time, and instead of the blips a voice from civil defence HQ would give instructions about how to prepare the village for the forthcoming assault, whether by nuclear weapon or cloud of radiation from elsewhere.

I suppose there's no harm in discussing all this. I do so with no subversive or investigative intent, and I am not to be numbered among the paranoids and freaks who make mock of civil defence. Any mirth, and it is slight, which attaches to the subject is at the paranoids' expense. A friend some miles

said that when Chernobyl blew up it was the nuclear-free-zoners and whitewashed-window comedians who were first to demand what precautions were being taken and why they were not being kept informed.

An article of faith among the freaks is that Mrs Thatcher will be comfortable because she will have a bunker, and Mr Hurd likewise. Chief constables and lords lieutenant will be safely underground, directing operations while the rest of us perish. If so we are among the fortunate and I don't envy them when they emerge.

You would have thought, however, that the INF agreement between Shultz and Shevardnadze would have allowed some relaxation. Some credible people, like Lord Chalfont, think we shall be worse off than before, but they are in a minority. But by an unfortunate piece of timing Shultz-Shevardnadze coincided with an evening's refresher course for those in the area on the carrier line, as this part of the UKMWO system is called.

We were advised to give the manual shren an occasional crank, which one of these days I will do, though it is still in the crate in which it was deliv-

some 40 years ago on the foundation of Nato. At any rate it was long before we became involved. Despite the crate we are better placed than a colleague in this dedicated corps of citizens. When he got his shren out for testing the dustmen, thinking it too rusty for use, took it to the dump.

We are advised to sound the siren only in the event of imminent physical attack. If the message says that the hazard is radiation drifting our way we are instructed instead to blow whistles and fire maroons. We have a whistle somewhere but I am not aware that we have any maroons. I can't find any in the outhouse where the shren is kept. I suspect that maroons are not issued until they might be needed ("during periods of heightened international tension" is the phrase) because we might let them off on bonfire night. Come the maroons we shall know things are getting serious, but the time has not arrived yet.

All in all we should probably cope. One is less certain about the top end of the organisation, which depends largely on the early warning station at Fylingdales. Whereas we should bring to the job all the energy born of novelty, and

occupy our lives, I'm not sure that anyone who has sat and gazed out from Fylingdales for 30 years, with nothing ever to report, would be fully alert if missiles appeared on screen. It's what we call the Mathias Rust effect.

The lesson of his flight to Red Square is that vigilance must never relax. Therefore the Royal Observer Corps will not relax a week today just because Gorbachev is spending a few hours at Brize Norton. One can, after all, think of a few in the Kremlin who might be tempted to kill two birds with one stone.

Scrutiny, in sum, of the arrangements for the unthinkable suggests they have been well thought out. The only misgiving is a slightly doctrinaire one. The carrier line to feed the receiver turns out to be the same as that used by British Telecom's speaking clock. But the speaking clock has been handed over to advertising interests and inserts the brand name of a watch every ten seconds. Come the day I would prefer not to be on standby at the receiver and be told that the bomb comes courtesy of Accurist. I assume, however, that UKMWO will have enough fact to allow me the scratch of

N-war study optimistic

Washington: A new federal study indicates that more Americans could survive a nuclear war than previously thought, and officials may use the results to lobby for increased civil defence spending.

The conclusions are based in part on the increased accuracy of Soviet missiles, which has allowed them to have smaller warheads, and on a new assumption that a Soviet attack would hit only those US population centres that are also industrial or transportation hubs, civil defence officials say.

The Federal Emergency Management Agency prepared a similar study in 1975 and concluded that 155.86 million Americans, out of a population of 241.6 million, were in areas that would probably be hit by direct atomic blasts in a nuclear war.

Now, the estimate is that 111.91 million Americans are in such areas and may die immediately.

Federal officials caution that their estimates are hypothetical, and that millions more people would die from other effects of nuclear war, such as fires ignited by blasts, fallout, and the general holocaust.

"Nobody is trying to represent this as attractive," the civil defence director at the federal agency, Mr Joseph Moreland, said.

But the results of the study suggest that protective measures could save American lives and more money should be spent on civil defence than the \$139-million agency budget for the fiscal year ending next October 1, Mr Moreland said. He would like an allocation closer to \$190 million.

The study, called Nuclear Attack Planning Base 1990, "flip flops," Mr Moreland said. "More people will survive than die."

The increased accuracy of Soviet missiles has allowed the Kremlin to decrease the size of its average warhead from 20 megatons to slightly less than one megaton, he said. A one-megaton bomb has the explosive power of 1 million tons of dynamite. The atomic bomb dropped on Hiroshima was 20 kilotons with the explosive power of 20,000 tons of dynamite.

Federal officials now believe that the Russians would use ground bursts against hardened military targets, such as the underground missile silos in Montana, North and South Dakota, Nebraska, Wyoming, and Missouri, seeking to have the weapon detonate exactly on the target to destroy it. — AP.

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