

SHelter

BULL DOGS DESIGN 18/3/83

pages (BJ February 19) had the familiar smell of old chestnuts being given another turn by two opponents with no understanding of each other's case and a lamentable failure to debate.

The central area of their disagreement is that while Gavin Charlton-Brown, for the pro-civil defence lobby, "finds it impossible to conceive of life after a nuclear holocaust", Kate Macintosh, for the pro-disarmament lobby, can imagine the consequences only too graphically. It is easy to poke fun at some of the wilder claims by both sides and even the nasty taste left by doubts of the independence of shelter proponents should be ignored, to reflect sensibly on the plausible arguments both sides present. These, as often as not, only serve to confuse and don't seem to help the less partisan reader.

It is clear that an individual can have concern for his safety, and this is the motivation for both the pro- and anti-shelter lobby.

The first point worth examining is to see what the response has been. There are

"The reason that civil defence and shelters will never be supported by a government facing the scale of threat we currently do is that for the 'good' of the nation it is best to maximise the initial casualties from a nuclear attack." So says Richard Ormerod, author of *Nuclear shelters* — A guide to design which is published on Wednesday by Architectural Press. Here he examines the mass shelter notion.

precious few government recommendations soundly based on scientific work, for reasons which will become apparent later. The response of the private sector has been generally to provide inadequate products, with exaggerated claims which often smack of the "cow-boy" mentality.

The chances of survival in a particular shelter depend on two aspects:

- first, how good are the design methods used in predicting the reduction of the various effects?
- and second, how good are the predictions of these effects from a given explosion?

There are reliable design methods based on theory and

tests in the laboratory and at nuclear test sites in the 1960s. These are often in obscure sources which are difficult for the interested professional to find, never mind the lay client. The diversity of the data makes it unlikely that all the methods currently in use could be described as consistent. Nonetheless they do exist and it would be possible to build a shelter for initial survival anywhere except close to ground zero.

The second point, of how well the effects of an explosion are understood, is more difficult to answer. An analogy between the Romans' razing of Carthage having the same effect as an atom bomb misses the point. What is important is

the time it takes. It took the Romans years to produce an effect caused in milliseconds by the bomb.

Survival in a shelter would only be for a few weeks and a couple of months at the most. Until the food and water ran out — the two most important concerns in any debate of the nuclear issue. But even without any shelters in the UK, and leaving aside the question of food and water for the moment, it is quite likely that 10-12 million people could be "alive" six months after a nuclear attack.

The cries for more effective defences to increase the number of survivors entirely miss the point and results from not

defence and shelters will never be supported by a government facing the scale of threat we currently do, is that for the "good" of the nation its best to maximise the initial casualties from a nuclear attack.

The basic concern is the food supply. The longer term holds the key, as a subsistence, labour-intensive agricultural society would have to be assembled in those few uncontaminated or lightly contaminated areas of the country. It seems likely that this could only support two to five million persons.

So the more people who perish immediately the less acute the strain on the survivors fighting for the (very) limited resources. Once viewed in this light policies such as "Protect and Survive" and non-evacuation take on a different perspective. What price the four minute warning?

This factor in the debate is closely related to the scale of attack — as the larger the attack the smaller the uncontaminated areas in this high target density island. Individual shelter would seem to be a viable option, when the march to Armageddon is as uncontrolled as at present.

Only if the scale of attack were dramatically reduced through true disarmament measures, such as success in the START talks, European DMZ and a freeze on the development of improved weapons systems would any mass shelter policy be viable. Yet paradoxically this would remove much of the heat from the current debate and reduce the demand for shelters as the threat reduced.

Surely the defence of the realm should be based on a more rational policy to reduce the threat we face and the mass shelter option finally laid to rest.