

always been adamant that it wanted a complete boycott of the elections. However, after a series of highly emotional meetings over the past few weeks, the party leadership carried the argument that the most effective way to demonstrate the Catholic minority's opposition to the Assembly would be through a massive show of votes at the ballot box. Accordingly, the decision was arrived at that the party would put up candidates for the election but they would not take their seats.

This is a very difficult stance on which to fight an election. Those Catholics who believe the SDLP should participate may well vote elsewhere; those who want a boycott may remain suspicious that candidates, if elected, will be tempted to jake their seats at some future date. To try and defuse this all candidates are being asked to sign pledges committing them to abstention. But the fact that very deep reservations do remain may be gauged from the fact that highly respected members of the party, such as Michael Canavan, the spokesman on Law and Order who has been a key organiser since the SDLP was founded, have refused to go forward as candidates. One comment made to me by a moderate Catholic gives some indication of their feelings: 'The main monument to Jim Prior's time here may turn out to be that he has reunited the Unionists and taken Catholics back to the abstentionist politics of the 1950s'.

THE SDLP faces other problems in the forthcoming elections. Provisional Sinn Fein is putting up some of its most popular local heroes. Their much more clear-cut stance of a total boycott of all British parliamentary institutions, including this one, could prove more popular with Catholics in the hard-pressed ghetto areas of Derry and Belfast, as well as Republican strongholds like mid-Ulster and Fermanagh.

At the moment the Northern Ireland Office's line is determinedly optimistic. The elections will go ahead. If this means that only Protestants will turn up to take part in the Assembly, so be it. In its early stages a great deal of time will be taken up with discussing constituency matters and British ministers will be seen to be influenced by what the Assembly members say. It will be made quite clear that those who attend are doing better by their constituents than those who do not.

Actual devolution of powers will not happen unless Protestants are prepared to make the concessions necessary to win the SDLP's agreement. Any hopes that Dr Paisley has of cobbling together 70 per cent support for his proposals in the Assembly (the figure which means that the Secretary of State must put them before Parliament) will not be fulfilled. If that means a Protestant walkout, again so be it. That, in turn, might tempt the SDLP in. The official hope is that sooner or later, particularly if Mr Haughey falls from power in the South, the mood will moderate, and politicians being politicians they will want to talk to one another. If this fails, (and one senses a deepening realisation that it probably will) well at least it should last long enough to keep things going until the next British general election. □

CIVIL DEFENCE

Planning for genocide

In a third report based on his forthcoming book* DUNCAN CAMPBELL, with PHIL STEADMAN, describes how the government underestimates the nuclear death toll

PRECISELY BECAUSE nuclear war would be so devastating, even the most aggressive military hawks are prepared to pay lip service to the ideal of nuclear disarmament.

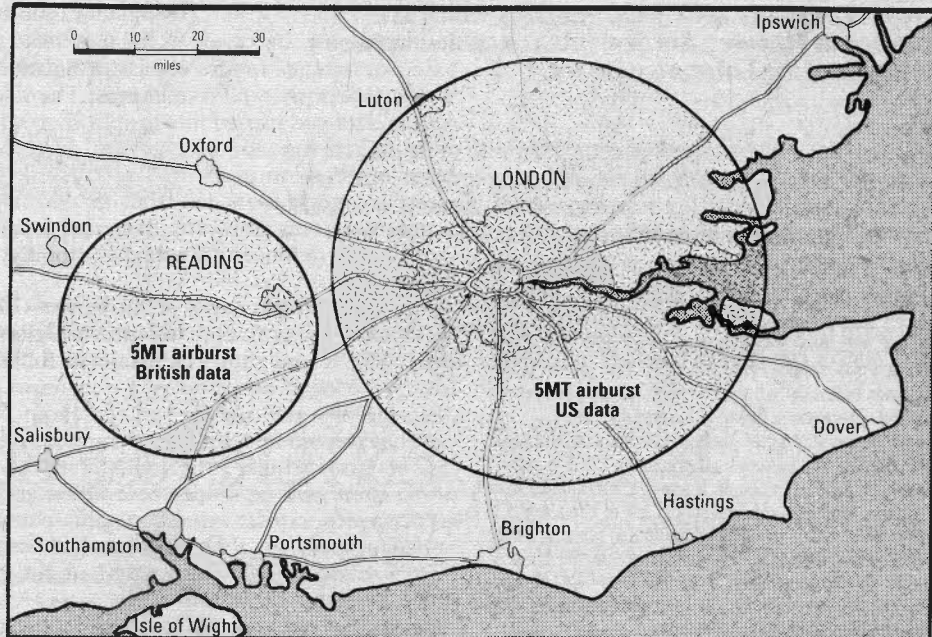
Over the years, however, there has been a systematic willingness to forget or underestimate exactly *how* devastating the Bomb would be.

Whitehall has produced estimates of how many would die in a nuclear attack on Britain. Until two years ago, these estimates were rigorously kept secret. But now claims have emerged that between 75 and 85 per cent of the population would survive a nuclear war. Such claims are frequently made in support of the government's 'civil defence' campaign. Two years ago, Home Office minister Lord Belstead claimed that the government's civil defence precautions would be responsible for 'saving' half the total number of survivors, then estimated at 47-49 million.

This absurd claim for civil defence has been repeated since as though it were a scientific calculation, although an examination of the original study on which it is based shows that it is a mere 'guesstimate'. More insidious, however, are the claims the government now makes as to the overall survival level after a nuclear attack. These are based on computer studies of

*WAR PLAN UK, to be published on 25 October by Burnett Books/Hutchinson, 488 ppps, paperback £6.95. See advertisement on p 00.

The effects of an airburst nuclear weapon (in this case a 5 Megaton hydrogen bomb) cover a much wider area than the Home Office publication, 'Nuclear Weapons', claims. The outer edge of damaging blast effects, when the pressure from the blast wave is about 0.75 pounds per square inch, can be up to 55 kilometres from the centre of the explosion. The Home Office booklet suggests that the outer edge is only 32½ km from the centre.



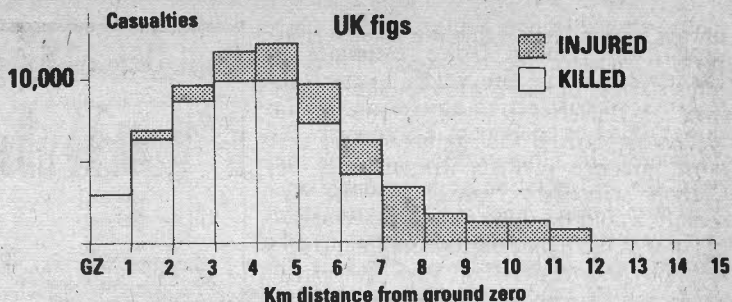
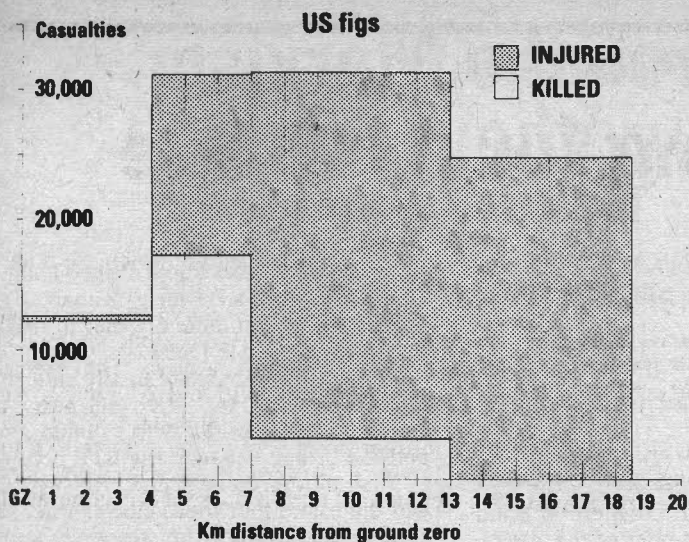
nuclear attack on Britain which are riddled with errors.

The Home Office claims that 85 per cent of the population (or about 46 million) would survive an attack. The realistic figure is between 10 and 20 million. And that is only the immediate death toll. Furthermore, civil defence plans – if followed – would produce millions more casualties than if there were none at all. Remarkably, this can be proved from the Home Office's own figures.

NUCLEAR TESTS held in the 1950s and 1960s provide the fundamental information from which estimates of the destructive power of the Bomb can be fashioned. First, there is the crushing blast wave which for a large (5 megaton) H bomb would probably demolish houses across an area of 130 square miles, shatter roofs more than 15 miles away, and break windows more than 30 miles away. Next, there is the 'heat flash', which ignites anything combustible and turns people exposed in the open into charred lumps of meat in a few seconds for up to 15 miles. Then come the pervasive plumes of fallout which, in most projected attacks, will eventually kill more than half as many people again as died from the immediate effects. Further millions will die trapped (because there will be no civil defence rescue services). Almost all the seriously injured will die (because necessary medical care cannot be provided). And many will die from radioactive fallout, disease, starvation, and exposure.

The Home Office's distorted view of the casualties of nuclear war starts by ignoring,

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American estimates of casualties caused by the blast effects of nuclear weapons are six to seven times greater than British estimates — although the British government, and NATO, have also circulated the American figures to British civil defence planners without noticing the discrepancy. This example shows the absolute numbers of casualties at varying distances from the explosion centre. The effects shown are for a representative 1 Megaton weapon exploding on a city with a uniform population density of 1000 people per square kilometre. British data describing blast casualties contains many mistakes, and at one particular distance from the centre of an explosion, casualties add up to 115 per cent of the original population. At least 23 years after this mistaken figure was first published, it has not been corrected.

entirely, deaths from:

- Burns of any kind;
- Fires in houses or firestorms in cities;
- Disease or plague;
- Starvation, or malnutrition compounding other problems.

But even more serious are the series of errors made in the Home Office's computer programmes, and in the physics on which they are based.

In 1981, a Home Office scientist, Sid Butler, gave a paper on 'Scientific Advice in Home Defence' to the British Association describing in outline how the Home Office got its totals. He claimed, cautiously, that

for a representative attack of 200 Megatons including city targets at least half and possibly 70 per cent of the population would be expected to survive . . .

In order to make any 'representative' calculation, it is obviously necessary both to know the quantitative effects of the Bomb and to make assumptions about the likely pattern of a nuclear attack. The Home Office produces elaborate tables and diagrams giving the former details, both as an HMSO booklet on 'Nuclear Weapons', and as a special private series, such as the *Training Manual*, and *Operational Handbook for Scientific Advisers*. These and similar publications are distinguished

by a remarkable level of internal self-contradiction.

The *Operational Handbook*, for example, contains three different tables describing the blast effects of nuclear weapons, giving three different results. Thus it produces figures based on the claim made in most Home Office scientific publications that, if a nuclear weapon is exploded in the air, the range of its effects is increased by only 30 per cent. But a second, more detailed table in the *Operational Handbook* shows that an airburst nuclear weapon increases the range of its effect between at least 40 per cent and 60 per cent.

The fundamental discrepancies are between British and American sources of information. In the United States, official data from bomb tests has been the basis for a standard published textbook, *The Effects of Nuclear Weapons*, by Samuel Glasstone and Philip Dolan, and a major study by the Congressional Office of Technology Assessment (OTA). Most of the data that the Home Office has circulated to its scientific advisers is in fact reproduced from Glasstone and Dolan. Some is reproduced from the OTA study. It is a remarkable testament to the Home Office's competence that it has apparently circulated this material without warning that it entirely contradicts its own studies, contained in the same reports.

The Home Office figures for blast casualties were produced in the mid-1950s, based on studies of the effects of Second World War high explosive bombs. The resulting data was turned into graphs, known as 'ARC', giving figures for the percentages of dead, trapped, and seriously injured at different ranges from the explosion centre. This graph (fundamental to all British civil defence estimates) is, bluntly, dishonest.

As the diagrams (above) show, the US OTA casualty estimates are much higher than ARC's and more plausible. 5 miles from a 5 Megaton explosion, for example, ARC graphs give no one killed, about 5 per cent injured and 3 per cent trapped. At this sort of distance, the OTA study reports, there will be 50 per cent killed and 40 per cent seriously injured. Similar comparisons apply at almost every distance; ARC's casualties fall to zero at about 8 miles from an explosion when the OTA suggests that one quarter of the population

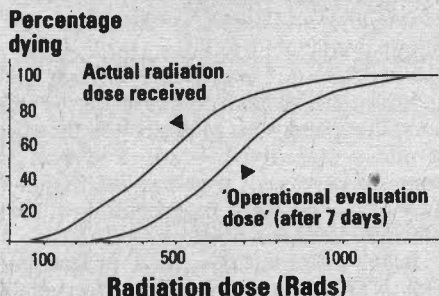
will be injured up to 13 miles away from the explosion.

The assumption in the ARC figures that nuclear weapons are like high explosive bombs is wrong. They produce blast waves whose duration and characteristics are far more devastating, often causing houses to explode outwards. The Home Office has also made no allowance for the fact that post-war British housing stock is flimsier in its blast (and radiation) resistance than pre-1950 buildings. A separate Home Office report in 1981 on the civil defence computer model pointed out that:

the blast from nuclear weapons compared with conventional weapons seems certain to result in much greater house damage, and therefore more casualties . . .

The same paper, by one of the inventors of the computer model, Mr P. R. Bentley, also identified three other factors which needed revision, as well as warning that the programme did not set out to calculate all the casualties from an attack — a qualification blithely ignored in statements for public consumption.

SO FAR AS radiation effects are concerned, the main plank of the government's civil defence advice to the public — set out in *Protect and Survive* — is to build a radiation shelter in the centre of your own home. If this were done properly, the level of radiation reaching those not killed by blast or fire could be reduced to anything from 3 to 30 per cent of its level outside — making a significant difference to survival rates. The extent to which a house and fall out shelter achieve this is



The use of an 'Operational Evaluation (radiation) Dose' in the Home Office's computer calculations significantly reduces casualty levels. For example, at a dose of just over 600 rads, when at least 80 per cent of those getting such a dose would eventually die, the Home Office calculates that only half that number, 40 per cent, would die. The Operational Evaluation Dose is based on the correct observation that people can survive a higher radiation dose if they receive it gradually. But this cannot properly be applied to people sheltering from fallout after an attack, who will receive almost all of their dose in little more than one day. The normal graph of death levels also assumes that everyone would receive full medical care — so casualties after a nuclear war, with medical care officially forbidden for fallout victims, would be even higher than shown here.



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called its Protective Factor, or PF. Once again, the Home Office estimates of protective factors are wildly higher (and estimated casualties consequently far lower) than in equivalent US reports. But in reality, the Home Office has little idea what the real situation is; particularly since post-war houses and modern bungalows have very low PFs. Last year, it published a picture book of houses with different PFs to give local emergency planning officers some idea of their actual local situation. In confidential documents, the Home Office has acknowledged that many people would die from radiation in modern houses, even if they followed *Protect and Survive* to the letter.

The Home Office also takes no account of the fact that houses which have been half-demolished, or had their roofs blown off or windows blown in will not have the same resistance to fallout as they did before the bomb went off. In a major concerted nuclear attack, almost every window in the country would be blown in. (Even in the Hiroshima attack, tiny by modern standards, windows were smashed as far as 17 miles away.) Householders would have little or no time to re-seal their houses against fallout before having to take shelter from radiation. Yet the Home Office computer programme, having first estimated numbers of houses blown down or damaged by blast promptly re-erects them, in effect, in perfect condition when it estimates death from fallout.

The computer calculates the death-toll from radiation on the basis of the estimated dose received, and in particular uses the 'LD50' dose – the level of 'Lethal Dose' at which 50 per cent of those exposed are assumed to die. The Home Office does not however use a realistic radiation dose in this calculation, but a so-called 'Operational Evaluation Dose'. This is based on a figure for radiation at the LD50 level effectively one third higher than the level generally accepted by radiation biologists as lethal. Undaunted, the Home Office now proposes to revise its assumed LD50 radiation dose level upwards by a further third.

EVEN IN THIS fairy-tale world of casualty estimates in which fires, burns, disease and other problems are ignored, and all other factors grossly underestimated, some of the figures which emerge are officially embarrassing. In his British Association paper last year, for example, Sid Butler provided graphs showing the likely different survival levels after nuclear attack if the population

- (a) obeyed the exhortations of *Protect and Survive* to 'stay put'; or
- (b) dispersed, contrary to government advice and civil defence policy.

The figures showed three types of attack – in each case, there were more survivors under option (b). In the case of an attack 'primarily on civilian targets', the difference in the death toll was between 6.6 million and 18.7 million dead. In other words, the Home Office's 'stay put' policy would kill an extra 12 million people. Indeed, the computer model chillingly assumed that everyone trapped and most of those seriously injured after an explosion would be written-off to die. □

Groucho Marxism without tears

Duncan Campbell (*City Limits*)

'Sax-mad she was.' 'What?' 'Lived for her instrument.' 'That's what I thought you said . . .' (Laughter.)

'There he was, this native, bone through the nose, shrunken heads round his neck . . . carrying his rude spear . . .' (Laughter.)

THOSE TWO EXCHANGES both come from the latest *Two Ronnies* show on BBC-TV. And Tony Allen, compere in Soho's *Comedy Store* and member of the *Alternative Cabaret*, sometimes starts his act: 'This drunk homosexual Pakistani takes his mother-in-law to an Irish restaurant and he says to the West Indian waiter "there's a racial stereotype in my soup".'

For some reason, 'humour', as practised on most club stages and TV programmes, has become conservative territory, colonised by the same kind of people who would have liked to colonise everything else. Yes, the dissidents were allowed their own island, with a flag planted on it by bright young people who named it Satire. But the land-mass has remained a country where the snigger-happy comic roams free.

Back in 1974, the Scottish comedian Billy Connolly came down to the London Palladium. He had already established a devoted following north of the border. But Scottish comedians, like Scottish goalkeepers and Edinburgh rock, often suffer in transit. Here was an exception. He won his word-of-mouth audience not with jokes about lovely pears or back passages, but with a monologue about the Crucifixion and a string of single entendres.

No one since has been quite able to pass on that brand of subversive humour to a mass audience. I can't see Ronnie Barker describing to a full house how Jesus slipped on a dog turd, or hear Bernard Manning making fun of the Army recruitment games. At the time, the *Evening News* predicted that he would disappear into the world of the 'comedy series'. But he didn't. And the *News* went bust.

Last summer, I went on a brief tour of the Middle East with Billy Connolly. In Doha, he addressed a packed house of expatriates, some of them delightful people who had learned the language and loved living there, but a number were those patriotic souls who bend your ear about how the unions have ruined Britain and how dirty the 'cloth-heads' (Arabs) are. It was the time of the Royal Engagement and Billy referred to it: 'Did you notice how they announced it on the day of the latest unemployment figures? Wonder what they'll do for the next lot – find a man for the Queen Mother, I suppose.'

To which some of the more patriotic spectators murmured 'Shame, shame'. And to which Billy replied: 'Aw, c'mawn – I'm one of these people who likes Britain so much he lives there.'

Here was a comic being subversive – and you can't get badder than making jokes about the QM, can you? It's one

thing to crack jokes about Prince Philip or Lord Denning at a Legalise Cannabis Campaign benefit, but quite another to present them centre stage in Doha.

Nothing happens quite neatly enough to form a theory in show business, but Connolly's success did help to build a suspension bridge between the land occupied by Irish mother-in-laws and cringing Pakis and the island that tried, albeit rather self-consciously, to fight the stereotype rather than exploit it. Fortunately, a crop of new comics have come along to add some dashes of paint to the bridge.

In the meantime, there has been some television comedy which has shifted the balance slightly away from the nudging laugh. In this I'd include some of *Not the Nine O' Clock News* and some of (Victoria) Wood and (Julie) Walters. But television can spell death to true subversives. Removed from the intimacy of a club audience and constrained by the rules on language and taste, they suddenly seemed about a quarter as funny as in their natural smoky late-night habitat. Tony Allen's recent experience with one TV company was that they wanted to excise all swearing and talk about drugs. It resulted in a sequence about the Pope and what he might snort to keep on top of all those gigs being reduced to a series of bleeps.

Of course it's not enough to declare yourself an Alternative Comedian and expect people to laugh at you for your political correctness. Nor is it enough, as another pioneering comedian, Roland Muldoon, observes, to make jokes by 'putting down the left in Soho', referring to regular routines about 'social workers in Stoke Newington' that now appear at the *Comedy Store*.

For the secret of all real comics – from Groucho Marx backwards and forwards – is subversion. There is nothing subversive about predictability. Sean Hardie (one of the NTNON producers and writers) has a theory that, when people hate or fear something and want to destroy it, they turn it into a stereotype – which is how we come to have such stereotypical Irishmen, gays, social workers, mothers-in-law, busty blondes, Jews and blacks.

Ronnie Barker described programmes like NTNON as 'offensive', presumably because it uses words like cunnilingus', while he would reach the same target by innuendo. NTNON hit back by doing a *Two Ronnies* sketch in which 'our pair' started off with the ground rules: 'Now when I say melons, I mean tits . . .' and so on. Not that it's made much difference to the Rons of this world. Such humour still hides behind a bath-towel with the word 'Bawdy' embroidered on it. □

Duncan Campbell is the News Editor of *City Limits* magazine. The book Billy Connolly: *Gulible's Travels*, compiled by Duncan Campbell and illustrated by Steve Bell is published this week by Pavilion Books, £6.95.