

Strathclyde NEWS

NUCLEAR WAR AND YOU

OUR RESOLUTIONS

1 ON July 8, 1981, the following resolution was passed by a large majority by Strathclyde Regional Council: "That this Council opposes the Atomic Missile Base at Coulport and demands the removal of all atomic weapons and bases in Strathclyde and Scotland."

2 ON September 1, 1981, by a large majority the Regional Council agreed to the lodging of objections to a proposal by the Ministry of Defence to develop an additional area of land at Coulport, Dumbarton, for the siting of the Trident Weapons System.

What if The Bomb drops here?



REGION SPELLS OUT ITS DUTY TO PUBLISH NUCLEAR FACTS

By Councillor DICK STEWART, Leader of Strathclyde Regional Council

RECENTLY the Government has made it clear that it wishes local authorities to make the public aware of what would happen if there were a nuclear war. It is also proposing to increase the home defence provision which is a local authority responsibility.

After all, many of the local authority services would have a major role to play in the situation.

This is why we have decided to publish this material. It is horrifying to read but while it does not, and cannot, claim to be fully accurate in its picture of Strathclyde after a nuclear attack — we are not privy to a potential enemy's war plans — it is an informed picture of what is likely to be the case.



ON THE BRINK OF THE FINAL ABYSS

"AS a military man who has given half a century of active service, I say in all sincerity that the nuclear arms race has no military purpose. Wars cannot be fought with nuclear weapons. Their existence only adds to our perils because of the illusions which they have generated.

"The world now stands on the brink of the final abyss. Let us all resolve to take all possible, practical steps to ensure that we do not, through our own folly, go over the edge."

The late EARL MOUNTBATTEN of Burma shortly before he was murdered.

WHAT would happen if Strathclyde suffered nuclear attack? Nobody knows — but experts can make informed guesses.

The effects of a single nuclear explosion are well documented. Physicists can work out how a succession of bombs would totally destroy life and property within a certain radius and poison the air over a much wider area.

Strategists can predict the likely pattern of an attack aimed at destroying this country's weapons.

Medical experts can admit the impossibility of treating large numbers of people suffering from burns, shock and radiation sickness.

Social scientists can suggest how groups would react in desperation when the settled structures of their lives are destroyed and existence becomes a fight for food and basic necessities.

Administrators can explain the problems of maintaining services essential for health and safety without experienced staff and equipment.

These forecasts are reflected in the Government's home defence

FOCUS ON THE NUCLEAR THREAT

plans and in the instructions issued to local authorities to make arrangements for emergencies.

What they all take for granted is that some people will survive, and that they will survive in a world where most of what we take for granted has been destroyed.

This paper spells out how Strathclyde would be affected if these informed predictions were fulfilled.

It is not scare-mongering or pleading a special case — merely presenting the facts given in official reports and Government circulars.

INSIDE — How two million could die

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THE NUCLEAR THREAT

HOW IT MIGHT HAPPEN

IN a recent circular to local authorities, the Scottish Home and Health Department made it clear that changes had occurred in strategic thinking, that preparations should be made for conventional as well as nuclear attacks and that the amount of warning of an impending attack might be measured in days rather than weeks.

"For planning purposes", states the circular "it must now be assumed that there may be as little as seven days' warning of an attack; the basic essentials

of plans should be capable of implementation within 48 hours."

Staff would be briefed on their roles before and after an attack.

The public would be requested to stay at home and warned that there would be no food or medical supplies provided if they moved away.

A major public information programme would begin and Government pamphlets "Protect and Survive" and "Domestic Nuclear Shelters" would be distributed.

People would be urged to construct domestic shelters either in their gardens or in their homes.

"Protect and Survive" advises the construction of a "fallout" room in the innermost part of houses as well as a basic shelter inside this room.

Everyone would be instructed to stay inside the basic shelter for 48 hours after the attack and not to leave the fallout room for 14 days after the attack.

The attack—and death rains from the heavens

THE most accurate information available on what could happen in Strathclyde comes from a computer exercise run last year by Scientists Against Nuclear Arms (SANA), which is an independent organisation formed in 1981 in response to the escalation of the arms race and the consequent danger of nuclear war.

Its membership includes natural and social scientists, engineers and technologists, statisticians and psychologists.

The SANA exercise listed the following targets and the weapons which might be used: Machrihanish — a nuclear weapons store and a crisis base for United States anti-submarine warfare aircraft — two 0.15 megaton groundbursts and one 0.15 megaton airburst.

Clyde Estuary at Tail of the Bank — one 5 megaton missile exploded in the river would destroy Greenock, Gourock and Port Glasgow.

Glasgow Airport would be destroyed by a 1 megaton groundburst.

Inverkip Power Station — 1 megaton airburst.

Glasgow — 1 megaton groundburst.

East Kilbride — 1 megaton groundburst.

Bishopclee — The Royal Ordnance Factory — 1 megaton airburst.

Kirkintilloch, which houses the SSEB electricity grid control — 1 megaton airburst.

Motherwell — 1 megaton airburst.

The Holy Loch, the US Navy's Poseidon submarine base — 0.5 megaton groundburst. The entrance to the Loch — 0.5 megaton waterburst.

Faslane, the UK Polaris submarine base — 0.5 megaton groundburst. Entrance to Gareloch — 0.5 megaton waterburst.

Coupar — which stores nuclear missiles for submarines — destroyed by a 0.5 megaton groundburst.

Glen Douglas, The Finnart Oil Terminal — 0.5 megaton groundburst.

Hunterston Nuclear Power Station — 1 megaton groundburst.

Ardeer oil refinery and port facilities — 1 megaton airburst.

Prestwick, which houses the USAF military airlift command, USN transport, anti-submarine warfare facilities, Scottish Air Traffic Control and British Aerospace — 1 megaton airburst.

AND AFTER IT'S ALL OVER...?

IN the aftermath of a nuclear attack, the priorities of the survivors would be to avoid disease and get enough to eat and drink.

Supplies of preserved food would probably be ample to sustain the remaining population for some time but there would be problems of distribution. Immediately after the attack, there might even be a glut of fresh meat as animals would have to be slaughtered before they were affected by radiation sickness.

Foraging in the ruins for cans of food would have to be controlled

and supplies kept in stores run — if the Government's regulations go through — by the local authorities.

The Home Office itself in its publication "Nuclear Weapons" (HMSO 1980) states: "Reasonable assessments of likely overall losses on the harvest following nuclear attack cannot yet be made.

"The early post-strike intensity of fallout could also prevent or delay harvesting operations with consequent crop losses. The sowing and planting of essential crops could similarly be delayed."

Because modern farming is dependent on artificial fertilisers, fuel, pesticides, and sophisticated machinery, most of which would have been destroyed, new systems of food production would have to be devised and these would take time to establish.

Industry, as we know it, would disappear almost completely. Apart from the destruction of plant by the attack, it would be largely irrelevant to the needs of people struggling to produce the food and basic shelter necessary for survival.

The role Region would have in any conflict

ALL local authorities have special responsibilities in times of an emergency, whether that emergency be a wartime one or a civil one.

They are the organisations which run many of the basic services essential to a community's survival — the supply of wholesome water, the provision of protection against fire and crime, the disposal of waste products, the provision of support for the young, old, sick and those who cannot help themselves.

Expertise

Local authorities have staff with the expertise to run such services; they are also the people on the spot with experience of organising things in their own area. In an emergency which destroys the normal chain of government they are the people best placed to take local control. During the 1960s, successive governments ran down civil defence but the present

Government has shown signs of wishing to revive the civil defence service. Local authorities have been directed by Government to "mitigate as far as practicable the effects of any direct attack involving the use of conventional, nuclear, biological or chemical weapons."

The rundown in civil defence during the 1960s did not, of course, affect the capacity of local authorities to deal with civil emergencies. The Regional Council has a small Emergency Planning Unit which has already assisted in coping with floods, major fires, oil pollution, an ammunition train derailed in a tunnel and other similar serious problems.

In February 1982, the Government issued a circular to local authorities indicating that it had been carrying out a major review of civil defence and was now inviting local authorities to step up their expenditure on it.

New regulations about civil defence will shortly be placed before Parliament. The proposals expected to be included in these new

regulations will not alter the existing system of national control under which power would be devolved to a number of Regional Commissioners, including one for Scotland (treated as a single Region for this purpose), in the event of central government being unable to continue its functions from its normal peacetime locations.

Assisted

The Commissioner for Scotland would be assisted by three Zone Commissioners and below these Zone Commissioners there would be two further tiers, i.e. the Regional Controllers who would be the Regional Chief Executives and below them the District Controllers, who would be the District Chief Executives.

Strathclyde Region would be part of the Western Zone which would also include Central Region and Dumfries and Galloway Region.

Regional Councils will also have to make plans, as directed by the Secretary of State, "to deal with population movement in the face of a threat of hostile attack."



THE FEW WHO WOULD BE LEFT

ACCORDING to the Scientists Against Nuclear Arms exercise, the total number of people killed out of Strathclyde's population of 2.4 million would be just under two million.

IN OTHER WORDS, ONLY 20 PEOPLE IN EVERY 100 WOULD BE LEFT ALIVE.

Most deaths would be caused by blast, followed by fallout and burns.

WHAT would happen if a one megaton groundburst missile exploded at the centre of Glasgow?

Immediately, a crater 1,000 feet across and 200 feet deep would form. Debris would pile up for three miles around the crater. Everything and every person within this area would be vaporised.

The explosion would cause a huge ball of fire and for up to six miles around George Square — that is from Carmunnock to Bishopbriggs, from Cambuslang to Knightswood — anyone exposed to the heat would suffer from third degree burns. The entire thickness of their skins would be destroyed and without intensive medical attention they would die.

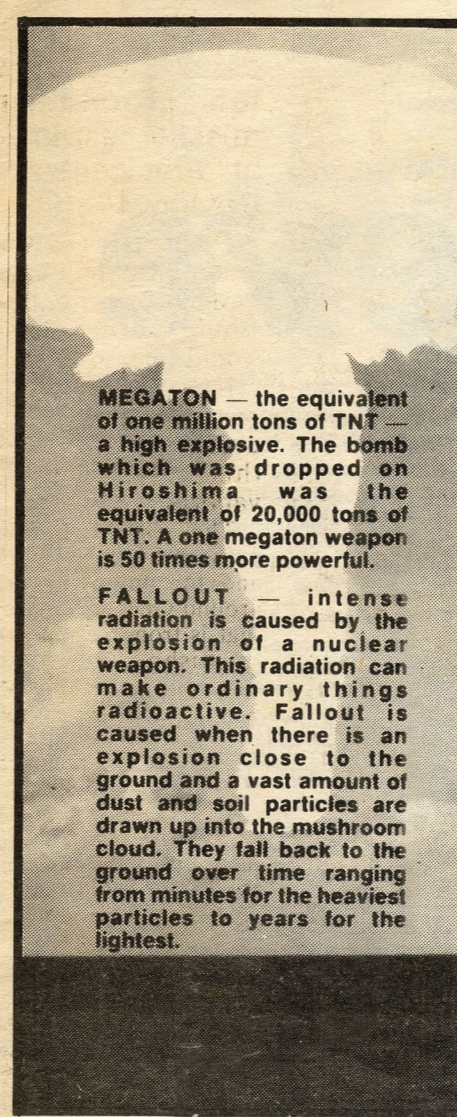
Explosion

If the explosion took place at night when the weather was clear, anyone looking in the direction of the explosion from as far away as Edinburgh would be blinded — perhaps permanently.

On a clear day, anyone looking in the direction of the explosion from as far out as Cumbernauld, Erskine, Kirkintilloch and Johnstone could also be blinded.

According to the United States Office of Technology Assessment, 58% of those within two miles of the centre of the explosion would be killed by the blast. Between two and a half and six miles, five per cent would be killed and 45% injured. Between six and nine miles, three out of ten adults would still die. The death rate among children would be higher.

Radiation from fallout would travel in the



MEGATON — the equivalent of one million tons of TNT — a high explosive. The bomb which was dropped on Hiroshima was the equivalent of 20,000 tons of TNT. A one megaton weapon is 50 times more powerful.

FALLOUT — intense radiation is caused by the explosion of a nuclear weapon. This radiation can make ordinary things radioactive. Fallout is caused when there is an explosion close to the ground and a vast amount of dust and soil particles are drawn up into the mushroom cloud. They fall back to the ground over time ranging from minutes for the heaviest particles to years for the lightest.



The effects of a one megaton ground burst on Glasgow. Apart from the massive destruction of property, everyone within three miles of the explosion would be vaporised.



GROUND BURST — a nuclear weapon of one megaton exploded at ground level would leave a crater 1,000 feet across and 200 feet deep. It would cause extensive fallout downwind of the explosion.

FIRESTORM — a firestorm is caused when many small fires — particularly in a built-up area — join together. This blaze consumes all the oxygen in the air and sucks in more from the surrounding area. This causes extremely high winds and people can be killed, not just by fire but by lack of oxygen to breathe.

'I am become death, shatterer of mankind'

direction of the prevailing wind. In the West of Scotland this is generally from the south-west. Anyone in Glasgow who survived the blast but who left shelter during the first 14 days after the attack would almost certainly die from radiation. Even in a fairly efficient shelter, which cuts out as much as 50% of the radiation, three out of ten adults would still die. The death rate among children would be higher. The survivors in the Glasgow area who

emerged after 14 days would find a world very different from that which they had left.

There would be no public services such as gas, water, electricity, sewerage, transport and very little medicine or food.

Those who were suffering from severe burns would not be able to get the medical care they needed. (In the UK at present not more than 100 acute burns cases can be handled at the same time).

Survivors would be divided into three categories. Those unlikely to survive after available treatment; those likely to survive after available treatment; those likely to survive even without treatment. Only those in the second category would be given any treatment. Health Service plans

state: "People suffering from radiation sickness only should not be admitted". Even healthy survivors would be in a state of shock. The decomposing corpses of human beings and animals would be a serious health hazard unless they were buried or incinerated as soon as possible.

There would be a growth of epidemics such as typhoid, cholera, hepatitis, dysentery, tuberculosis and various respiratory illnesses. It is likely that all household pets would have to be killed to stop epidemics. Even in those areas where the radiation count was low there would

be severe problems in recovering survivors from the ruins of buildings. The number of people in a fit state to form rescue parties would be very limited. If the prevailing south-west wind was blowing, communities as far away as Tayside and Fife could be threatened by fatal fallout from the Glasgow bomb. In areas where fallout was less concentrated, survivors might be able to leave their shelters for a few hours a day after the

first week or so but would be advised to stay in the shelter most of the time. A change of wind could spread the hazard to other areas which are less likely to sustain a direct attack. And this destruction would come from a single bomb in the centre of Glasgow. If it was accompanied by other strikes, as predicted in the SANA exercise, almost the whole of the Region would be devastated and the central area would be completely uninhabitable.

The full effects of all-out nuclear war were spelled out in the Journal of the Royal Swedish Academy of Sciences...

"By the most conservative estimates, the survivors of this (global) nuclear war would suffer from 5.4 to 12.8 million fatal cancers; from 17 to 31 million would be rendered sterile; and between 6.4 and 16.3 million children are likely to be born with defects in the subsequent 100 years."

'I am become death, shatterer of mankind...'

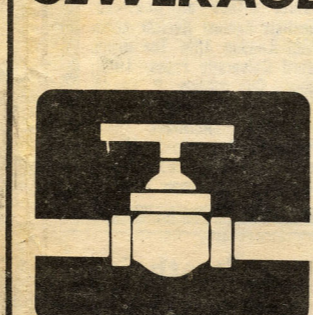
... was the passage from Hindu scripture which flashed through the mind of Robert Oppenheimer, the man who led the team of scientists which developed the atomic bomb, as he watched the mushroom cloud from the first test weapon rise up toward the heavens above the Alamogordo, New Mexico, test site on July 16, 1945.

FIRE



vivors would be in rural areas but it is in these sparsely populated areas that sophisticated fire-fighting equipment is least available. In the city and the built-up areas, those fire-fighters who survived would find that there was no water to tackle fires.

SEWERAGE



EVERY day Strathclyde supplies 250 million gallons of water to consumers. Most of the water comes from surface areas, including small local reservoirs mainly in country areas.

Among the largest are Loch Katrine, Loch Lomond and the Daer Valley scheme in the very south of the Region.

Unlike other parts of the United Kingdom, Strathclyde gets very little of its water from rivers through purification schemes, or from boreholes.

This has advantages and disadvantages. In time of peace Strathclyde water is about the purest in Britain. But in times of war it could be easily con-

smaller ones would be put out of order. Many water pipes are laid close to sewers. If the sewers burst, they could contaminate drinking water remaining in the pipes and it is unlikely that enough of the 1,100 staff in the Sewerage Department would remain alive to be able to cope with the special problems for many months or even years.

At the same time, the attack would allow sewage to come to the surface and lead to various epidemics.

Rats and other creatures which inhabit the sewers would also be driven to the surface, carrying many bacteria and viruses which would cause disease. These creatures are more resistant to radio-activity than humans and would spread the epidemics. They could infect domestic pets and owners would be advised to destroy dogs, cats and other creatures as soon as possible.

WATER



taminated by radio-active fallout.

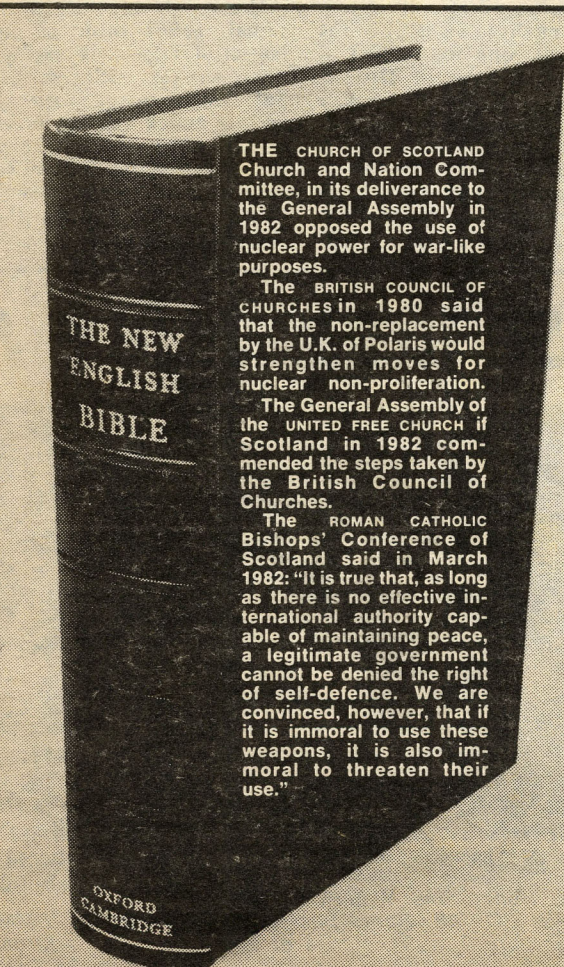
The prevailing wind in Strathclyde is from the south-west and nuclear attacks on Hunterston Nuclear Power Station, the Faslane complex and on government facilities

around the Solway Firth could rapidly contaminate and poison the main water supplies.

Particularly to the north of Glasgow, water pumping stations and pipelines could also sustain severe damage which would prevent even poisonous water being used for fire-fighting.

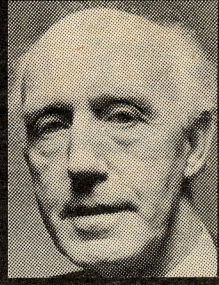
The Government recommends that families should store enough water for 14 days — this is equivalent to 3.5 gallons for each person.

Survivors suffering from radiation sickness, untreated injuries and problems caused by unhygienic living conditions would need double that amount of water.



THE CHURCH OF SCOTLAND Church and Nation Committee, in its deliberation to the General Assembly in 1982 opposed the use of nuclear power for war-like purposes. THE BRITISH COUNCIL OF CHURCHES IN 1980 said that the non-replacement by the U.K. of Polaris would strengthen moves for nuclear non-proliferation. THE GENERAL ASSEMBLY OF THE UNITED FREE CHURCH OF SCOTLAND IN 1982 commended the steps taken by the British Council of Churches. THE ROMAN CATHOLIC Bishops' Conference of Scotland said in March 1982: "It is true that, as long as there is no effective international authority capable of maintaining peace, a legitimate government cannot be denied the right of self-defence. We are convinced, however, that it is immoral to use these weapons, it is also immoral to threaten their use."

DICK STEWART



Talks about Strathclyde's stance on the nuclear threat

What we believe

WHY did the Regional Council refuse to take part in the Government's civil defence exercise called Hard Rock last autumn? Surely it is in everyone's interest that as much preparation as possible should be made to deal with an event like a nuclear attack?

CIVIL defence is largely aimed at preserving the machinery of government. Successive administrations have made it clear that there would be no attempt to try to provide protection for the general public.

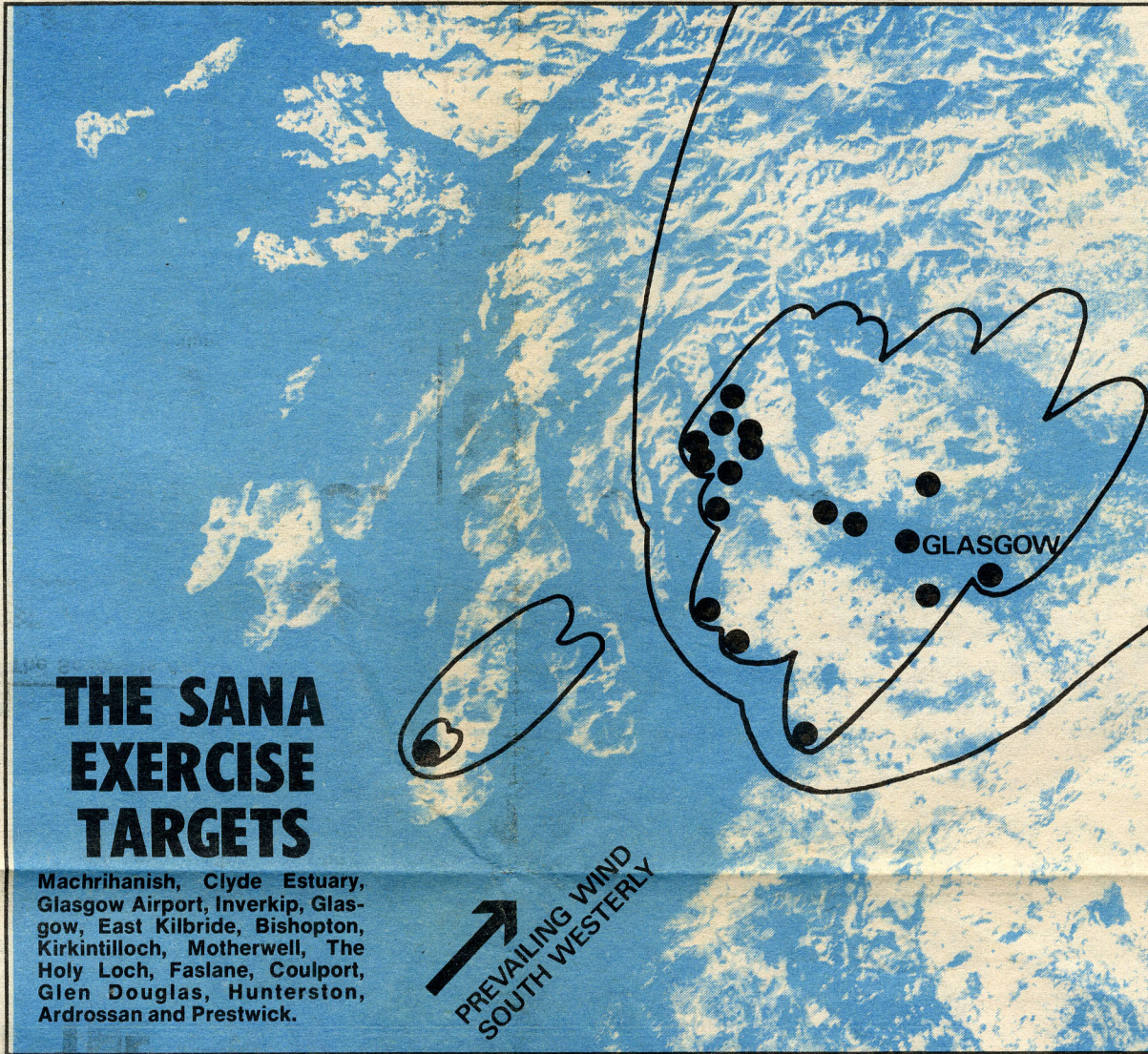
If government was concerned to protect the public, it would be spending the thousands of millions of pounds needed to provide underground shelters for the people of Britain.

Instead, spending for the whole of Scotland for 1983/84 is £2.3 million — equal to 42p per head of population.

The Regional Council considers that the presence of so many nuclear bases around the Clyde makes the West of Scotland a prime target for nuclear attack.

That is why, in seeking to have the area of Strathclyde recognised as a nuclear-free zone, we demand their removal.

IT is clear that the West of Scotland is a prime target but surely the "balance of terror" means that any enemy would be deterred from creating such a holocaust — for themselves as well as for us?



The Scientists Against Nuclear Arms (SANA) exercise Strathclyde targets, and the resulting lethal radioactive fallout, which would spread right across Central Scotland.

THAT has been the view of successive governments in the past and may well have been true then.

But weapons can now be targeted with incredible precision against other weapons rather than against cities. This makes the military believe now in the possibility of pre-emptive strikes.

Secondly, there are now so many weapons — about 20 times more than needed to kill the whole world — owned by a growing number of diverse regimes that the danger of accidental war has greatly increased.

It was essentially those reasons which led so many people in Strathclyde over the past couple of years to demonstrate their concern and persuaded the Regional Council to commit itself to the campaign for the removal of nuclear bases.

WHAT has the Regional Council done to pursue this commitment?

- IT has:
- Lodged an objection to the development of the Trident base at Coulport.
 - Organised a public inquiry to explore the various planning and strategic arguments in relation to this proposal.
 - Through various means such as this newspaper attempted to ensure wider understanding and debate of these crucial issues.
 - Refused to take part in the Government's civil defence exercise planned for the autumn of 1982.

Councillor DICK STEWART is Leader of Strathclyde Regional Council

Strong support for Trident inquiry

THE Government recently announced its plan to replace the independent weapon system carried in Polaris submarines and based at Coulport on the Clyde with the Trident system.

Unlike normal planning applications, the Ministry of Defence proposals are not subject to the decisions of local government.

A District Council Planning Committee can decide on whether or not to allow a "hot food carry-out" to open but neither it nor the Regional Council — the strategic planning authority — is allowed to decide whether or not there should be a nuclear weapons base on someone's doorstep.

Development

Normally on a development of this scale, there would be a public inquiry to allow the various arguments to be put to an independent person who would report his views to the Secretary of State.

Twelve months after the initial advertisement of the Coulport proposals, there was still no indication that the Government would hold a public inquiry and allow the

arguments to be heard openly and debated democratically.

Strathclyde Regional Council, with the support of almost all the 19 District Councils, decided to organise a public inquiry of its own.

The terms of reference for the inquiry are: "To receive and consider with regard to the Government's proposed siting of Trident missiles at

Coulport, Dumbarton, all the evidence, whether written or verbal, before them on the impact of Trident on employment, services, health, safety, pollution, propensity to nuclear attack and any other matter which they consider relevant and thereafter to assess that evidence and report their findings on it to the Regional Council."

IN the aftermath of a nuclear attack, the present system of control would break down.

Experience shows that looting and violence would probably be common.

The maintenance of public order would be the responsibility of Regional Commissioners of whom

LAW AND ORDER IS A PRIORITY

there would be one for Scotland based in Edinburgh.

His powers would be backed by surviving police

and armed forces and a system of courts with emergency powers.

To quote a Home Office circular: "In conditions in which death, destruction and injury were commonplace, such penalties as probation, fines or sentences of imprisonment would no longer be effective. Such penalties as communal labour, restricted rations and exposure to public disapproval might be appropriate for all but the gravest offences but, in the case of flagrantly antisocial behaviour, there might be a need for harsher penalties than would be generally acceptable in peace-time ..."

... "Regional Commissioners, acting through their commissioners of justice, would be empowered to impose such penalties as they thought fit in the light of conditions and circumstances at that time."

The source material

THE sources from which this publication has been produced are all publicly available. None is restricted or classified in any way although some may have been at an earlier date.

Those Scottish Home and Health Department circulars in the ES (Scot) i.e., Emergency Services (Scotland) series which are not now restricted or classified.

Nuclear Weapons, Scottish Home and Health Department, 1980: Protect and Survive, HMSO; Strathclyde Regional Council Minutes 1981/82, various Committees, including Policy and Resources Committee and Planning and Development Committee; Strathclyde Regional Council, Abstract of Accounts and Financial Report, 1981/82 ...

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... The short-term effects of a nuclear attack on Scotland, Scientists Against Nuclear Arms, 1982; London After The Bomb, Oxford University Press, 1982; Beneath City Streets, P. Laurie, Granada, 1978; Ground Zero, SANA (West Midlands), 1982; Apocalypse Now, Lords Mountbatten, Noel-Baker and Zuckerman, Spokesman, 1980.

SURELY THEY MUST KNOW...



"... IT is right for information about civil defence and the likely effects of a future war involving the UK to be made generally available in peacetime. The public has a right to knowledge of these matters."

Rt. Honourable WILLIAM WHITE-LAW PC, MP, Home Secretary — February 2, 1982, House of Commons.



"IN an all-out nuclear war, more destructive power than in all of World War II would be unleashed every second... The survivors, if any, would live in despair and the poisoned ruins of a civilisation that had committed suicide ..."

President JIMMY CARTER in his farewell address to the Nation — January 14, 1981.



"AS the British Government's White Paper on Defence put it as long ago as 1957, there are no means of protecting the population against the consequences of nuclear attack. There are none today ..."

LORD ZUCKERMAN, formerly Chief Scientific Adviser to the Ministry of Defence, in Nuclear Illusion and Reality, Collins 1982.

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