

PART 10: USEFUL ADDRESSES AND RESOURCES

10.1 Useful Addresses

TP Addresses

TP administrative address - contact Trident Ploughshares, 42-46 Bethel St, Norwich, Norfolk, NR2 1NR, UK.

TP email - tp2000@gn.apc.org

TP phone and fax- Tel:01324 880744 Fax: 01436 677529

Email discussion list - to be included on it, contact Jane on tp2000@gn.apc.org

TP Newsline Answerphone - 01603 469296

TP Website - www.gn.apc.org/tp2000/ or www.tridentploughshares.org

Legal Support - General and Scotland team: contact Jane on 01436 679194 Fax: 01436 677529

England: contact Andrew on 0191 209 3140 or e-mail andrew@andrewgray.uklinux.net

Cornton Vale Prison Support Group - contact Helene on 01259-452458

Other Court and Prison addresses are listed in Part 7.7.4 and 7.8.2

Press Team - contact David on 01324-880744.

Nonviolence workshop bookings - c/o Alison Crane, 36 Yelverton Ave, Weeping Cross, Stafford, ST17 0HE. Tel: 01785 611768 email: alison.crane@ntlworld.com

Other Addresses

Faslane Peace Camp - Shandon, Helensburgh, G84 8NT. Tel: Phone: 01436 820901 email: faslania@faslanepeacecamp.org or faslanepeacecamp@hotmail.com website: www.faslanepeacecamp.org

Nukewatch UK - 22 Edmund St, Bradford, BD5 0BH. Contact Di McDonald on 02380 554434 email: nis@gn.apc.org

National CND - 162 Holloway Road, London, N7 8DQ. Tel: 020 7700 2393 Fax: 020 7700 2357 email: enquiries@cnduk.org website: www.cnduk.org

Scottish CND - 15 Barrland St, Glasgow, G41 1QH. Tel: 0141 423 1222 Fax: 0141 423 1231 email: cndscot@dial.pipex.com

Turning The Tide - Friends House, Euston Road, London, NW1 2BJ. Tel: 020 7663 1064 Fax: 020 7663 1049 email: kiris@quaker.org.uk

World Court Project UK - c/o George Farebrother, 67 Summerheath Rd, Hailsham, Sussex. 01323 844269. email: geowcpuk@gn.apc.org website: www.gn.apc.org/wcp

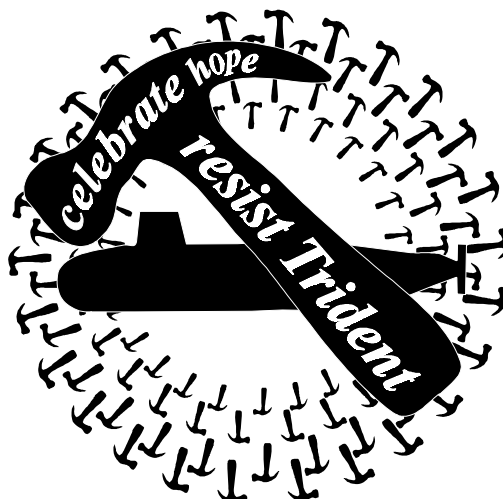
10.2 Resources

10.2.1 Useful Facts, Figures and Diagrams

Trident costs Britain:

- Between £1bn and £1.5bn a year
- £2000 per minute

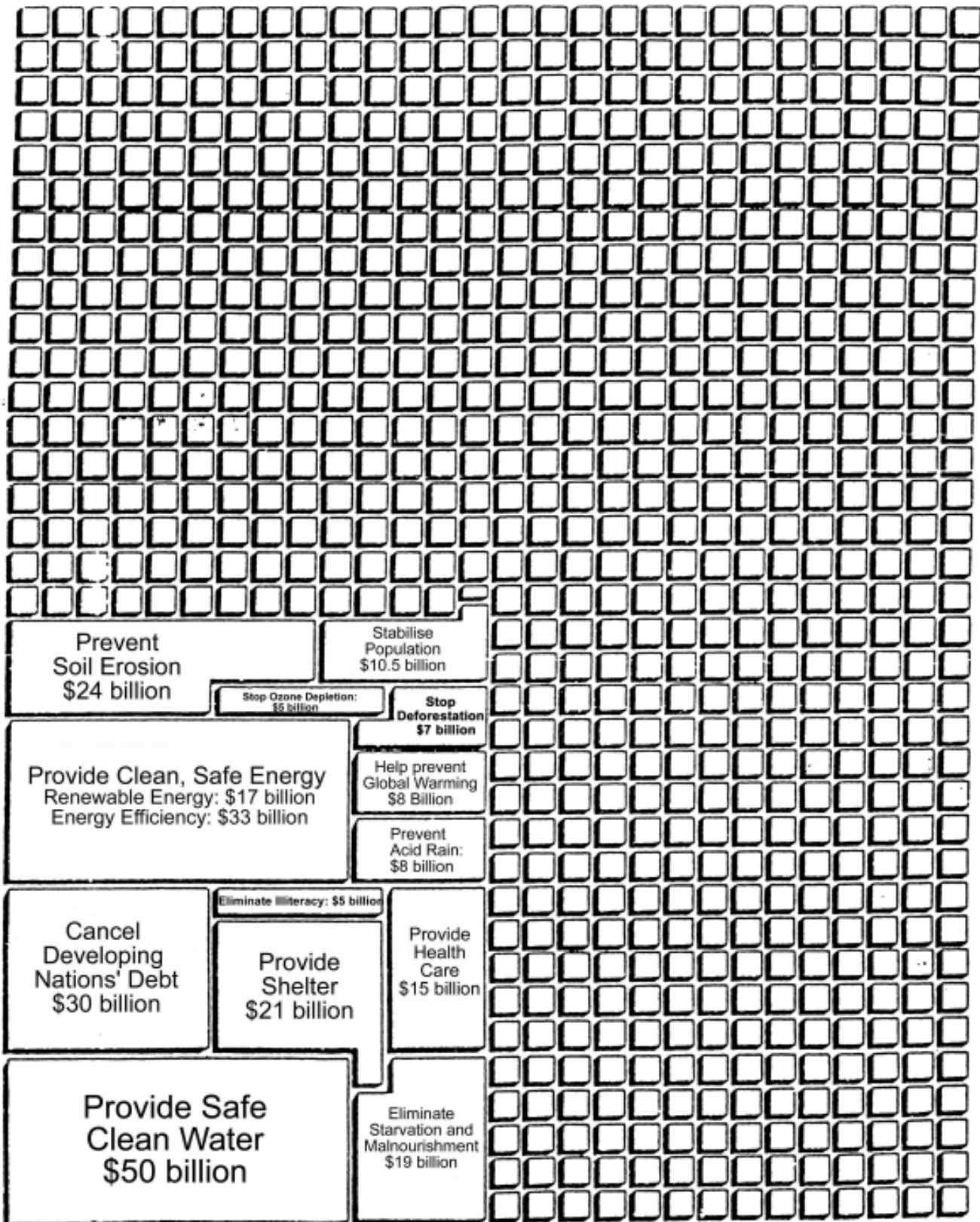
To work out how much money would be available to your community if it wasn't being wasted on Trident, take the annual spending figure, divide it by the British population (60m), multiply it by the population in your area, put it on a poster or leaflet and go and do a street stall. It is a good idea to illustrate the point by costing the socially useful projects that could be funded instead.






What the World Wants

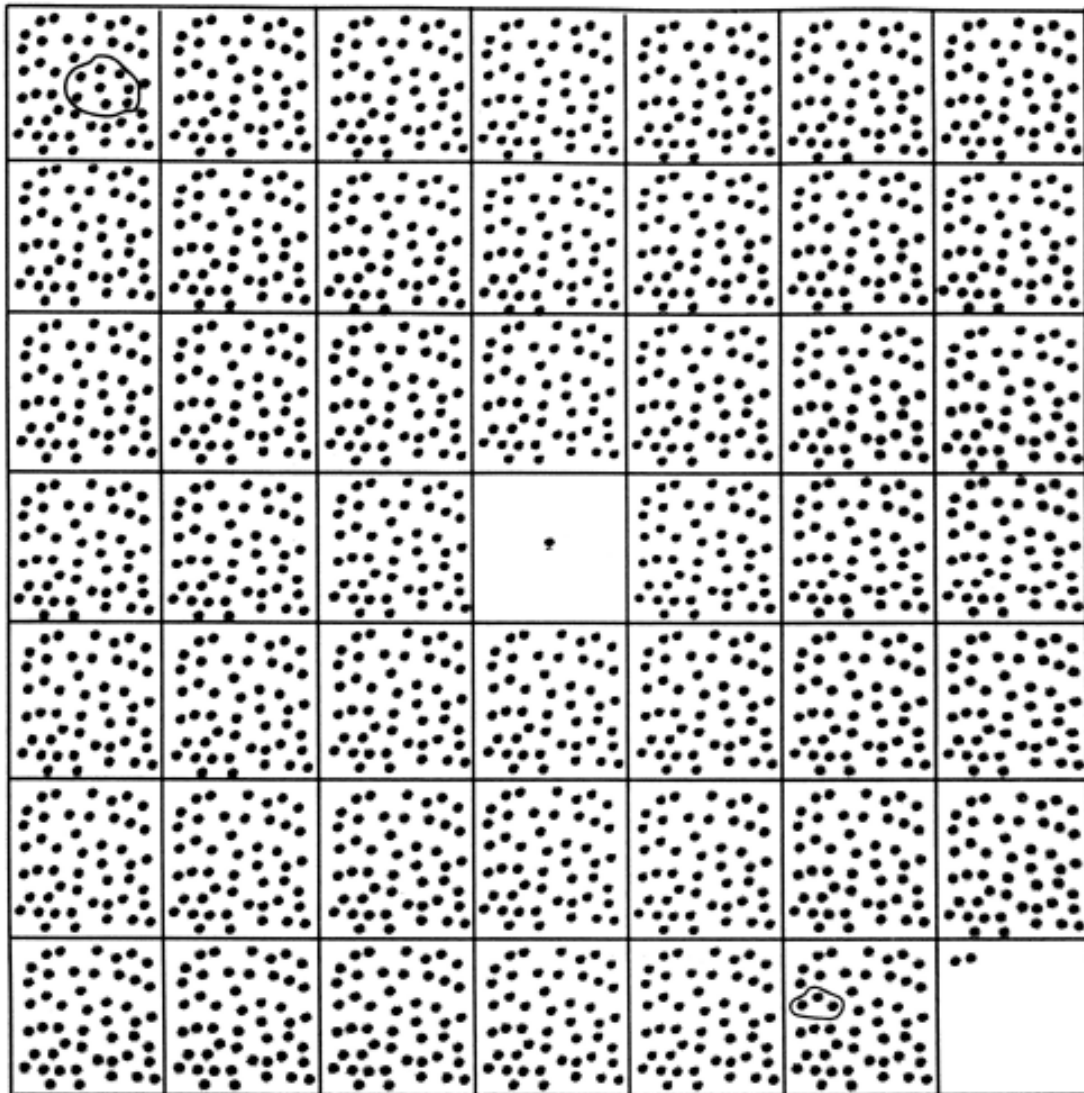
and how to pay for it

using World Military Expenditures.



The above are estimated annual costs of various global programs for helping to solve the major human need and environmental problems facing humanity. Their combined total cost is approximately 25% of the world's total annual military expenditures. All figures are at 1994 prices.

-  Total Chart = Total Annual World Military Expenditures: \$1 trillion
-  One-tenth of One Percent of Annual World Military Expenditures: \$1 billion
-  Amount That Was Needed to Eradicate Smallpox From the World (Accomplished 1978): \$300 Million

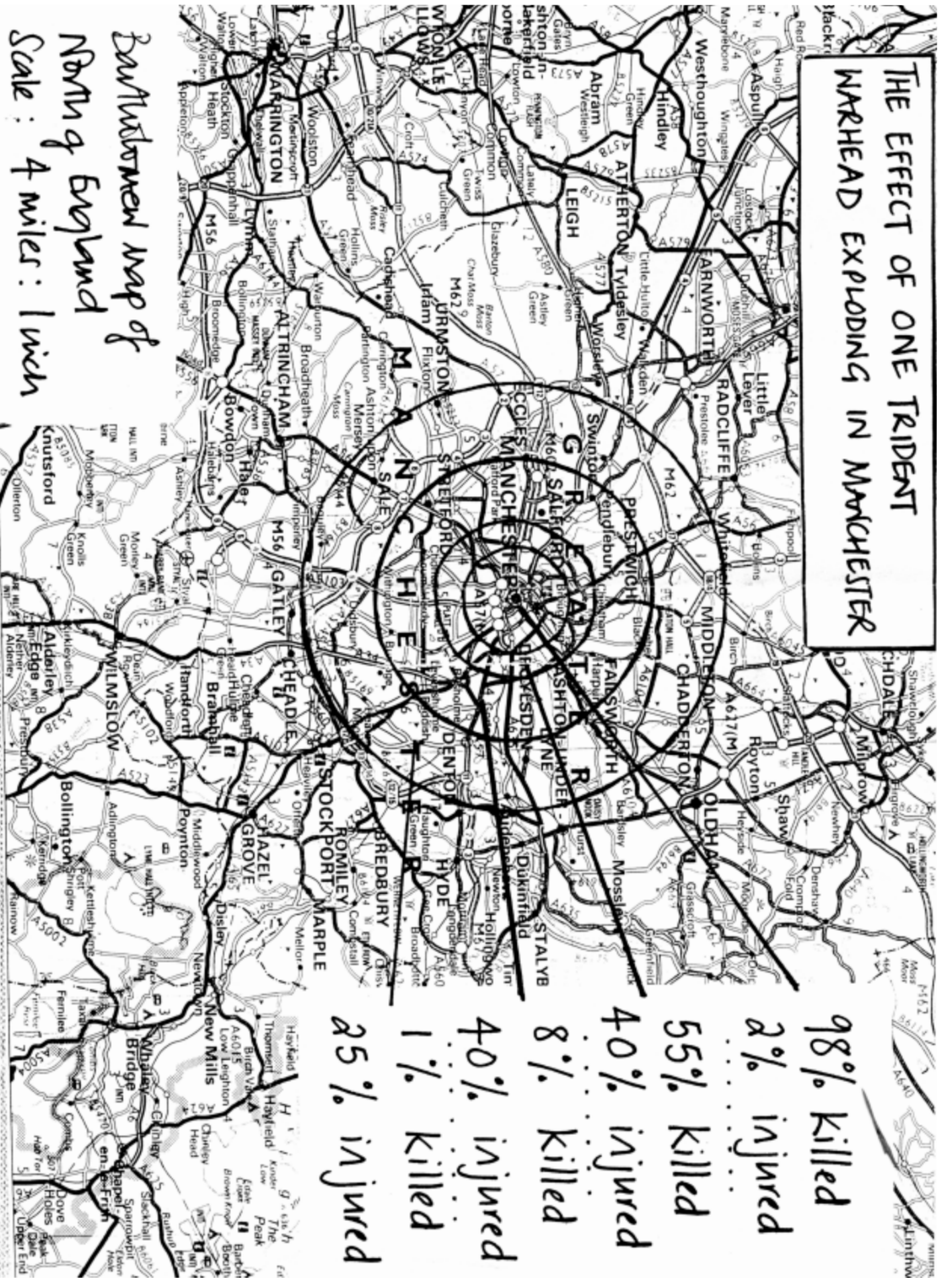


Nuclear Overkill in the 1990s

A dot chart similar to the one above was originally produced at the height of the Cold War, when the world's nuclear arsenals numbered above 65 000 weapons. This chart is a revision of that original, revised to reflect today's current arsenals, which number approximately 35 000 weapons. The majority of these weapons are divided between the US and Russia.

- The dot in the centre of the chart represents all the firepower of World War II - three megatons.
- The other dots represent the world's present nuclear weaponry, equal to 2667 World War IIs.
- The dots in the circle at bottom right - nine megatons or three World War IIs - represent the weapons on the Poseidon Submarine. This is enough firepower to destroy more than 200 of the largest cities in Russia, the US, or anywhere else in the globe.
- The dots enclosed by the circle at top left - 24 megatons or eight World War IIs - represents the weapons on one Trident submarine, enough firepower to destroy every major city in the Northern hemisphere.
- Just two squares (plus four more dots) - 300 megatons - represents enough firepower to destroy all the large- and medium-sized cities in the world.

**THE EFFECT OF ONE TRIDENT
WARHEAD EXPLODING IN MANCHESTER**



Bartholomew map of
North of England
Scale: 4 miles: 1 inch

10.2.2 A Sample Letter to Your Favorite Policy Maker

Dear

While I was encouraged by the sentiments of the need for nuclear disarmament expressed at the recent Non-Proliferation Treaty (NPT) Review Conference, I am however disappointed by the lack of concrete action taken, in particular that no timescale was agreed for total disarmament.

I believe that the people of Britain have waited long enough for nuclear disarmament to take place. Many of us share the government's priority of education and healthcare, and look forward to a time when the resources now spent on weapons of mass destruction are used in more positive ways.

Opinion polls show that the majority of UK citizens want the government to work harder to bring about a nuclear weapon free world. A poll taken in 1997 shows that 59% of British people believe that it would be best for British security if we do not have nuclear weapons. This belief stems from the fact that, although the NPT has mostly been successful in preventing widespread proliferation of nuclear weapon technology and production, there have been many failures. The moral and bargaining position held over non-signatories of the NPT who have now acquired nuclear weapons (India, Pakistan and Israel) is much weakened by our own possession of them.

The concept of the use of these weapons, which would cause unspeakable suffering, is utterly abhorrent. This suffering would be borne mainly by innocent civilians rather than by combatants and would effect neutral states that had nothing to do with the conflict.

In addition to the moral argument against the Trident system, there is a strong legal case. The International Court of Justice's Advisory Opinion found that the threat or use of nuclear weapons is generally contrary to international humanitarian law, and the Court confirmed unanimously that their threat or use, like other weapons, must comply with international humanitarian law and be judged according to their effects. Weapons which could not distinguish between civilian and military targets, would be unlawful.

The Court could not decide whether threat or use of nuclear weapons by a state would be lawful if its "very survival would be at stake" because it did not have sufficient detailed information before it. The British Government, after repeated requests, has declined to outline a way in which Trident could be used in line with international law. But I know that the UK Trident system consists of 100 kiloton warheads. I do not believe that the effects of the use of such a large warhead could ever be controllable or limited in such a way as to conform with international law. I would therefore ask that you inform me immediately of when you will uphold the law and disarm these illegal weapons of mass destruction.

I am also concerned about US plans to break the Anti-Ballistic Missile Treaty with its National Missile Defense programme which is strongly opposed by Russia and China. This is a dangerous and ill-advised move, and I would hope that Britain would take a stand against this development which is liable to renew a global arms race, and not co-operate with the US Government by allowing our land and resources to be used for such purposes.

I believe that Britain should cancel the Trident nuclear weapons system programme, with the first practical steps being:

- Declare a "no first use" of nuclear weapons policy as promised before the 1997 General Election;
- Remove Trident from NATO command;
- Immediate removal of Britain's four Trident submarines from 24 hour patrol;
- Immediate removal of the nuclear warheads from their delivery vehicles and their safe, secure storage ashore prior to dismantling;
- Help establish discussions which will address the technical, financial and political steps which will need to be taken in order to negotiate a Nuclear Weapons Convention.

There is an urgent need for Britain to take the lead in the international nuclear disarmament process. I ask that you do all that you can to speed our way towards a nuclear weapons free world.

Yours sincerely,



10.2.3 Information about Nuclear Accidents

By Dr Lloyd Dumas

A decade ago, when the Cold War ended, much of the world heaved a collective sigh of relief.

Fifty years of confrontation between two superpowers armed with arsenals of nuclear weapons had come to a close—peacefully. Finally, it seemed, the ticking nuclear time bomb had been defused. But things are not always what they seem.

Though the Cold War is over, it has left behind a deadly nuclear legacy that continues to threaten us. Late last summer, when the Kursk, the newest submarine in the Russian fleet, sank, the world's attention was focused on the fate of the 118 Russian sailors aboard. But the sinking was more than just another tragedy at sea. It sent two more nuclear reactors, and possibly nuclear warheads as well, to the nuclear graveyard at the bottom of the sea.

“There is an average of almost one serious [nuclear] accident every six months for nearly half a century. In addition to submarines, these accidents have involved fighter planes, bombers, missiles, military nuclear waste storage facilities and surface ships.”

There they joined the half-dozen reactors and almost fifty nuclear warheads already scattered on the floor of the world's oceans. It is not at all clear how much environmental damage this part of the Cold War legacy is currently doing or will do in the future. It is equally unclear just how stable all these reactors and warheads will prove to be as the years go by.

How did they get there? Two US and five Russian nuclear submarines preceded the Kursk to the ocean's floor. Just one of those ships, a Yankee-class Russian submarine that sank because of an explosion triggered when liquid missile fuel aboard caught fire, added one reactor and 34 nuclear warheads to the total. It was carrying 2 nuclear torpedoes and 16 missiles with two warheads each when it went down 600 miles Northeast of Bermuda in 1986.

In the mid-1990s, Russian scientists told American experts that the ship had broken apart, and that the

missiles and warheads it scattered around the ocean floor were badly damaged. The Russians also reportedly said they believed it is “certain that the warheads are badly corroded and leaking plutonium and uranium.”

In the 45 years before the Kursk was even built, there were at least 89 serious, publicly-reported nuclear military accidents (listed in the appendix of my book, *Lethal Arrogance*).

That is an average of almost one serious accident every six months for nearly half a century. In addition to submarines, these accidents have involved fighter planes, bombers, missiles, military nuclear waste storage facilities and surface ships. Fifty-nine occurred in US forces, 25 in the Russian/Soviet military, four in the French and one in the British armed forces. These include: an A-4E Skywarrior jet loaded with a B43 nuclear warhead that rolled off the American aircraft carrier *Ticonderoga* and sank in 3,000m of ocean 200 miles east of Okinawa in 1965; a Soviet military aircraft carrying at least one nuclear weapon that crashed into the Sea of Japan before 1970; and a 1984 accident, also in the Sea of Japan, in which a Soviet Golf-2 class nuclear submarine was disabled and set adrift when the missile fuel it was carrying caught fire.

In 1989, the American military finally disclosed that the B43 nuclear warhead that fell into the sea near Okinawa was still at the bottom of the sea, only 100 km from the nearest Japanese island. They also said they believed the enormous water pressure at that depth had almost certainly broken the H-bomb apart, contaminating the ocean floor with highly toxic plutonium.

Huge inventories of plutonium and enriched uranium are yet another part of the deadly Cold War legacy. Plutonium is particularly dangerous. In early 1996, the US Department of Energy (the agency running the American nuclear weapons program) issued a landmark report, “Plutonium: the First 50 Years,” in which it indicated that its stockpile of plutonium, combined with that of the Department of Defense, totalled 111,400 kg.

Only 4 to 5 kg of plutonium, a metal which is heavier than lead, is enough to build a typical nuclear weapon. Inhaling as little as 1 to 12 mg of plutonium dust will kill half of the humans exposed within a year or two; inhaling as little as one microgram can cause lethal cancer after a long latency period.

Every system for keeping track of inventories includes a category that amounts to a margin of error. The US plutonium accounts are no exception. Up to 1978, it was called “material unaccounted for” (MUF); after 1978, it was changed to “inventory difference” (ID). The meaning, however, remained the same: MUF/ID is the difference between what the record keeping system says is in the inventory and what a physical count shows is actually there.

The First Fifty Years reported that the MUF/ID for US plutonium accounts averaged about 2.5 percent. It claimed that improved practices lowered the MUF/ID to only about 0.8 percent in later decades. Yet even an MUF/ID of 0.8 percent applied to the enormous American plutonium inventory would leave some 890 kg in the “uncontrolled” fringe, enough to build 180 nuclear weapons—more than enough to destroy any nation on earth.

And we have not even considered the inventories of plutonium held by Russia, where there is reason to believe that records of nuclear materials are far less accurate. At least as recently as 1996, Russia still did not have accurate records of the quantity, distribution and status of nuclear materials at many of the 1500-2000 specific nuclear areas throughout the former Soviet Union.

Being in the “uncontrolled fringe” does not mean that the plutonium is lying around unprotected in some school yard or parking lot. It means that that much plutonium could have been taken from the stockpile without the record keeping system ever showing that it had disappeared.

The MUF/ID problem also exists for inventories of other nuclear materials, chemical explosives, conventional arms and for that matter, nuclear weapons. We know that police in Western Europe have recorded hundreds of arrests in schemes to sell nuclear materials on the black market that have apparently been stolen from facilities in the former Soviet Union.

General Alexander Lebed, former security advisor to Boris Yeltsin, claimed in 1997 that more than 100 “suitcase” nuclear bombs were missing from the Russian arsenal.

Less than perfect control of these inventories could encourage proliferation to other countries. Equally frightening is the possibility that terrorists or criminals might someday get their hands on either nuclear weapons themselves or the nuclear materials critical to building them.

The knowledge required to design workable nuclear weapons has been in the public domain for a long time. More than 25 years ago, two American undergraduate college students designed workable weapons independently of each other in a matter of months, using only publicly available information.

The key issue is access to the required nuclear materials. According to contemporary reports, the Aum Shinrikyo doomsday cult, which released sarin nerve gas in the Tokyo subways in 1995, was also suspected by Japanese police of having tried to acquire uranium to be used in building nuclear weapons.

About the same time, it was reported that 17 scientists at Los Alamos nuclear weapons laboratory in the US had been given the assignment of trying to build terrorist-type nuclear weapons using technology no more sophisticated than that found at typical consumer electronics stores and nuclear fuel of the type that might be acquired on the black

market. They successfully built more than a dozen “homemade” nuclear bombs. The legacy of the Cold War also includes a huge amount of nuclear waste, the by-product of nuclear weapons production.

In Russia, the Kola Peninsula has become a junkyard for a hundred Soviet era nuclear-powered submarines, rusting away with their nuclear reactors still on board. 50,000 nuclear fuel assemblies from those reactors sit in storage tanks, some of which are undoubtedly leaking, and in open air bins on military bases and shipyards. It may take decades to transport them for reprocessing or safer, more permanent storage.

More than 20 percent of the US population now lives within 50 miles of a military-related nuclear waste storage site. Millions of gallons of liquid nuclear waste are stored in tanks above or just below ground. There have been many problems. At one site, in Hanford, Washington, more than 900,000 gallons of radioactive waste leaked from 68 storage tanks and another 1.3 billion cubic meters of liquid radioactive waste and other contaminated fluids were deliberately pumped into the ground.

The government had claimed that there was no reason to worry, because none of the waste would reach groundwater for at least 10,000 years. Yet by November 1997, it was already there.

The fact is, no one yet knows how to safely dispose of or store all the nuclear waste we have generated, some of which must be isolated from the biosphere for more than 10 thousand years.

That is longer than all of recorded human history. Considering all that has changed—politically, socially and technologically — from a time thousands of years before the pyramids of Egypt to the space and computer age, it is difficult to imagine that we could even keep track of, let alone precisely control, so much dangerous material for so long.

Another part of the legacy, Cold War institutions, ways of operating and ways of thinking are still very much with us. Today, a decade after the Cold War, thousands of American nuclear weapons, and presumably Russian nuclear weapons as well, continue to be operated on quick response alert.

While it is true that many US and Russian missiles are now targeted at the open sea, it is also true that they can be retargeted within minutes. This is a very dangerous situation. It is not difficult to invent a scenario in which the failure to de-alert these weapons could lead the world into an accidental nuclear holocaust. But it is also not necessary.

On January 25 in 1995, Russian warning radars detected the launch of a rocket from the Norwegian Sea. About the size of US submarine-launched Trident missile, it seemed to be streaking toward Moscow: time to impact, only about fifteen minutes.

The radar crew transmitted the warning to a control centre south of Moscow, which relayed it up the chain of command to President Yeltsin. Alarms

sounded on military bases all over Russia to prepare to attack. Only a few minutes before the response deadline, senior military officers finally decided that the rocket was headed far out to sea. It was not a threat to the Russian homeland.

Where did this missile come from? It actually was an American rocket — a scientific probe designed to study the aurora borealis, launched from the Norwegian island of Andoya. Norway had notified the Russian embassy in advance of the launch, but somehow the message never reached Russian military commanders.

In January 1987, the Indian Army was preparing to carry out a major military exercise near the bordering Pakistani province of Sind. Because there was a great deal of secessionist sentiment in Sind, the Pakistanis mistakenly concluded that India was preparing to attack, and moved their military forces to the border. Seeing this, the Indian military sent reinforcements.

Soon these two nations, which had fought three wars with each other since 1947, had one million troops on the border, waiting for war to begin. Fortunately, intensive diplomatic efforts managed to clear the confusion, and the crisis ended.

India and Pakistan had come very close to having a major war by accident.

Today, they have made little progress resolving the tensions that brought them so close to accidental disaster. Today, both are armed with nuclear weapons.

We must find a way to free ourselves from the deadly legacy of the Cold War. We cannot simply assume that all of the nuclear weapons and nuclear reactors littering the world's oceans will remain stable indefinitely and do us no harm.

Careful studies must be done of the feasibility and desirability of alternative methods of retrieval, treatment or permanent entombment in place.

Since this is a global problem, the results of these studies should be made public and subjected to open international criticism and debate. And when a decision has been made as to the best approach, whichever nations can most effectively implement it should be mobilised in a concerted, cooperative and timely effort.

We must assure that worldwide inventories of plutonium and enriched uranium are reduced to a form not easily converted into nuclear weaponry, carefully stored, monitored and guarded. Far more attention must be paid to the development of improved technology for the treatment and safest possible storage of nuclear waste. At present, funding levels for this kind of research are paltry compared to the magnitude of the problem nuclear waste poses to our present and future wellbeing.

Without any further delay, all nuclear nations should de-alert their nuclear arsenals. It is hard to imagine by what logic that was not done years ago. But we must go much farther. It is time, not just to reduce arsenals of nuclear weapons.

It is time to build a movement strong enough to rid the earth of them. In the mid-1990s, George Lee Butler, the general in charge of all US strategic nuclear weapons from 1991-1994, and General Charles Horner, head of North American Aerospace Defense publicly declared their belief that nuclear weapons can and should be abolished.

In 1996, more than 50 other retired generals and admirals from the US, Russia, Britain, France and China signed a statement at the UN endorsing that idea. The Cold War ended long ago. It is time that we do everything possible to permanently bury its remains. To do anything less is to court disaster on a global scale.

Lloyd Dumas is author of Lethal Arrogance: Human Fallibility and Dangerous Technologies (New York: St Martin's Press, 1999). From 1994-1996, he was consultant on conversion to Los Alamos National Laboratories. Currently he is Professor of Political Economy at the University of Texas at Dallas.

Trident Submarine Runs Aground In Clyde

The Trident nuclear submarine, HMS Victorious, hit a sandbank in the Clyde Estuary at the end of November. Apparently the submarine was travelling on the surface in poor weather conditions at the time. It crashed into Skelmorlie Bank and hit sand and mud. The vessel then returned to Faslane and is now back at sea again. The MoD has just admitted that the accident took place and that there was minor damage to the casing of the hull.

This happened within two weeks of a similar incident. The hunter killer submarine HMS Triumph hit the seabed on 19 November 2000 off the West coast of Scotland.

"These Trident submarines are a risk to the people of Scotland. This incident could have resulted in a major nuclear accident. The submarine should never have been in water so shallow that it could hit the seabed."

References and Acknowledgements

10.2.1 Useful Facts, Figures and Diagrams

This section was written by Rachel Boyd and Davida Higgin.

10.2.2 A Sample Letter to Your Favorite Policy Maker

The letter was composed by Rachel Boyd.

Recommended Further Reading

From Nuclear Deterrence to Nuclear Abolition - General Lee Butler, Address to the National Press Club in Washington on December 4th 1996.

This text is available on our website, and comes highly recommended.

Trident Ploughshares Pledgers' List

River	England	Andrew Gray	England	Joy Mitchell	England
Mark Akkerman	Netherlands	Alison Greenhalgh-Watson	England	Koen Moens	Belgium
Justin Alexander	England	Hannah Griffin	England	Janet Moir	England
Stephen Allcroft	England	Sara Groser	England	Ellen Moxley	Scotland
Kathryn Amos	England	Dirk Grutzmacher	Australia	John Myhill	England
Emma Appleton	England	Gyosei Handa	Japan	Martin Newell	England
Marcus Armstrong	England	Anthony (Teapot) Hannigan	Scotland	Grace Nicol	Scotland
John Baker	Ireland	Helen Harris	England	Bill North	England
Morag Balfour	Scotland	Tracy Hart	England	Allen O'Keefe	England
Gaynor Barrett	England	David Heller	England	Yuko Ohara	Japan
Emilia Benjamin	England	Davida Higgin	England	Jean Oliver	Scotland
Johanna Berking	England	Dougald Hine	England	Igge Olsson	Sweden
Duncan Blinkhorn	England	Robert House	Scotland	Tara Ann Plumley	England
Hazel Bloor	England	Mike Hutchinson	England	Frances Judith Pritchard	England
Anna Boll	Netherlands	Fredrik Ivarsson	Sweden	Brian Quail	Scotland
Amanda Booth	England	Rosie James	England	Hazel Rennie	England
Rachel Boyd	England	Louise James	Ireland	Ian Richardson	Scotland
Sylvia Boyes	England	Hanna Jarvinen	Belgium	Natasha Jane Ritchie	Scotland
Betty Brown	England	Sid Jefferies	Wales	Ian Roberts	Scotland
Liz Brown	England	Petter Joelson	Sweden	Ulla Roder	Denmark
Roz Bullen	Scotland	Helen John	England	Koen Roggen	Belgium
Stuart Burbridge	England	Terry Johnson	England	Dave Rolstone	England
Janet Cameron	Scotland	Margaret Jones	England	Anne Scholz	Germany
Una Campbell	Scotland	Sian Jones	England	Amy Scott	England
Warren David Canham	Scotland	Tarna Kannisto	Finland	Norman Shanks	Scotland
Kay Carmichael	Scotland	Mary Kelly	Ireland	Douglas Shaw	Scotland
Viv Carnea	England	Martyn Kelly	Ireland	Katri Silvonon	Belgium
Martina Caruso	England	Paul Andrew Kelly	Scotland	Lou Smith	England
Maggie Charnley	England	Jutta Kill	Germany	Rick Springer	USA
Anna Coldham	Scotland	Ganesh Bruce Kings	England	Robert Peter Sprocket	England
Vanessa Cope	England	Carol (Kez) Kirby	England	Helen Steven	Scotland
Maxwell Craig	Scotland	Leeron Koren	Israel	Eleanor Stobo	Scotland
Alison Crane	England	Andrea Kuhnke	Germany	Barbara Mary Sunderland	England
Cat Crone	England	Hans Lammerant	Belgium	Robban Sundstrom	Sweden
Emily Crosby	England	Peter Lanyon	England	Jane Tallents	Scotland
Marilyn Croser	Scotland	Sarah Lasenby	England	Alan Thornton	England
Sarah Cunningham	England	Mark Leach	Scotland	Anna Tuominen	Finland
Pol D'Huyvetter	Belgium	Martin Lee	England	David Turner	Scotland
Susan Davis	England	Annette Lee-Forrester	England	Astrid Ubas	Netherlands
Bernard De Witte	Belgium	Kristel Letschert	Netherlands	Wendy Vale	England
Stuart Dennis	England	Richard Lewis	England	Susan Van Der Hyden	Netherlands
Paul Dolman	England	Anja Light	Australia	Iskander Van Spengen	Scotland
Mog-Ur Kreb Dragonrider	Scotland	Jens Light	Australia	Krista Van Velzen	Netherlands
Hugh Drummond	Scotland	Anne Livingstone	Scotland	Eric Wallace	Scotland
Rowland Dye	England	Angela Loveridge	Wales	Agnes Walton	Scotland
Klaus Engel	Sweden	Debbie Mace	England	Stokely Webster	Wales
Keeley Morris	England	Babs Macgregor	Scotland	Zoe Weir	Scotland
Roo Eris	England	Tigger Macgregor	England	Rachel Wenham	England
George Farebrother	England	Sheila Mackay	Scotland	Louise Wilder	England
Claire Fearnley	England	David Mackenzie	Scotland	Maire-Colette Wilkie	Scotland
Marguerite Finn	England	Jacinta Manning	England	Alan Wilkie	Scotland
Iona Fisher	Scotland	Yoshie Marute	Japan	Marjan Willemsen	Netherlands
Roger Franklin	England	Barbara Maver	Scotland	Erica Wilson	England
Clive Fudge	England	Eoin Mccarthy	Scotland	Ben Wincott	Scotland
Jenny Gaiawyn	England	James Mclachlan	Scotland	Raga Woods	England
Myra Garrett	England	Kath McNulty	Wales	Marlene Yeo	England
Kirsty Gathergood	England	Kate McNutt	England	Becqke Young	England
Martha Goddard	England	Joan Meredith	England	Angie Zelter	England
Colin Goldblatt	England	Joan Miller	Scotland		