NUKEWATCH INFORMATION PACK



WHAT IS NUKEWATCH?

NukeWatch is not a membership organisation. It is a network of individuals who campaign against nuclear warhead convoys, mainly because they are part of a system of Weapons of Mass Destruction, but also because we believe that communities potentially affected by the convoys should be aware of their existence and the risks they pose.

Nuclear Warhead Convoys – A Brief Introduction

A nuclear warhead convoy is a cluster of vehicles travelling by road in convoy formation either:

- carrying Trident nuclear warheads
- travelling empty on the way to or from such a mission
- engaged in an exercise simulating the transport of warheads, or
- en route to or from an accident & emergency exercise on a military base

The convoy comprises:

- the warhead load carriers (enormous, plain dark green trucks)
- Ministry of Defence Police escort vehicles
- military support vehicles to deal with accidents or breakdowns
- Royal Marines (in plain blue minibuses) and military land rovers, and
- an MoD Fire Engine

A nuclear warhead convoy is easily recognisable and unlike anything else on the roads. It is often spread out over a couple of miles, and travels at up to 55mph. There is a multiplicity of escort vehicles, and the carriers are Foden 44 tons, seven axle, articulated dark green trucks (See illustrations in Spotters Guide section). Apart from the Marines' vehicles, the convoy is garaged and maintained at Aldermaston.

Cargo

The Trident warheads are carried in large crates inside the green trucks. They are fully assembled and complete. The core of the warhead is a ball of plutonium and uranium. This is surrounded by specially developed conventional high explosives which would be ignited to create the critical mass necessary for a nuclear detonation when launched and targeted.

Destinations and Routes

The components for the warheads are made at AWE Aldermaston in Berkshire and taken to nearby AWE Burghfield for assembly. The convoys take the completed warheads north, from Burghfield to Coulport. At Coulport, north of Glasgow, the carriers are unloaded and the warheads placed in underground bunkers in the Trident Area. When required they are taken to the Explosives Handling Jetty where they are fitted onto the missiles on the Trident submarines.

The warheads require regular checking and batch samples are taken from the Coulport depot to Burghfield and returned to Coulport after servicing. The frequency of convoys varies from year to year. 2004 saw only one or two loaded convoys, but unladen training runs every month or so. Between September 2006 and August 2007 Nukewatch logged 5 journeys to Coulport which would have been 6 except for the UK's security level being raised to critical after the incident at Glasgow airport. Currently there's a convoy every 6 to 8 weeks.

The MoD prefers convoys to travel on motorways and A roads but at either end of the route they must use smaller roads. Not all roads are passable due to the great weight of the convoy trucks. There is an eastern route, mainly relying on the A1(M) but also using the M1, and a western route using the M6. Emergency exercises take place on bases in East Anglia and occasionally elsewhere.

For routes see map in Section 3.

Risks

Following years of denials, the MoD admitted in 2006 that a serious accident involving a nuclear warhead convoy could partially detonate the warhead. This was according to a declassified report from the MoD obtained by the New Scientist in July 2006¹.

According to the report, a serious vehicle collision or an aircraft crash combined with multiple failures of the MoD's secret protective measures could mean that the weapon might not remain single-point safe (in

¹ See http://www.newscientist.com/data/images/ns/av/mg19125594.300.pdf NUKEWATCH INFORMATION PACK DEC 2007

plain English that means a single incident could result in a nuclear reaction). The report puts the overall yearly risk of an "inadvertent yield" in the UK at 2.4 in a billion, mainly due to the possibility of an aircraft crashing onto a convoy. Inadvertent yield is MoD-speak for an accidental nuclear explosion. This is likely to be a partial yield, also called fizzle yield, smaller than the full yield of up to 100 kilotons but still devastating for the area it happens in.

Prior to this report the Ministry of Defence had said there was no risk of a nuclear detonation during transport. But it had said how in an accident the highly volatile "conventional" explosive could be set off, causing the warhead to 'jet' plutonium. It estimates that, in a serious accident, a circle some 600 yards in radius would be affected by blast and fragments of explosives.

Even more problematic than this explosion would be its effect in dispersing alpha emitting plutonium and uranium particles downwind for miles. If even tiny particles are ingested or inhaled they can cause cancer².

Nuclear warhead convoys travel close to large urban areas and through large towns. It would be impossible to evacuate heavily populated areas on the routes in time to avoid the potential consequences of an accidental release of radioactive particles. MoD accident guidelines do not explain whether traffic would be quarantined, sent on its way or gridlocked in the contaminated zone.

Frank Barnaby, a nuclear physicist who worked on the UK nuclear weapons programme said "The MoD report confirms what many scientists have long suspected – that nuclear bombs can go off by accident". "They have also effectively admitted that a terrorist attack could cause a nuclear explosion. A Trident warhead exploded in a densely populated area could kill hundreds of thousands of people. However small the risk, that is too horrifying to contemplate."

In reply to a Freedom of Information request by a Nukewatcher, the MoD Director of Information David Wray stated that the consequences of a terrorist attack on a convoy are, "likely to be considerable loss of life and severe disruption both to the British people's way of life and to the UK's ability to function effectively as a sovereign state."

Nuclear Warhead Convoys and Local Authorities

Local Authority Emergency Planning Officers have been given guidance (the Local Authority & Emergency Services Information³) about how to respond to any emergency arising from the passage of convoys. Local police are informed when a convoy is due to pass through their area, but not Fire Brigades. See Section 6 for more detail.

As well as the nuclear warhead convoys there are other nuclear transports on the roads – Special Nuclear Materials (SNM) convoys which have blue carriers rather than green. They have a smaller escort, travel faster at 60mph, and do not use northern or eastern routes.



A Nuclear Warhead Convoy stops to check a faulty warning light in Scotland.

³ See http://tinyurl.com/2fb2lw It is worth comparing this with the United States version at http://www.orau.gov/reacts/

² See US Environmental Protection Agency at http://www.epa.gov/radiation/understand/index.html

Changes in Warhead Convoy Transport

For many years, the MoD took the view that it wasn't safe to drive nuclear warheads around in the dark. However, in 2005, they changed to a system of "continuous running" which cuts the time taken for the convoys to complete their journey from three days to around 24 hours.

"Continuous running", involves only brief stops and a crew change. Travelling in the dark, from Nukewatch's experience (and the MoD's own risk assessments prior to 2004), increases rather than reduces the risk (see 'Risks of Continuous Running' below.) Nukewatchers had to quickly adapt to the new challenge of continuous running so as to monitor the convoys and confirm the level of UK nuclear weapons activity on our roads.

For over 25 years, there have been regular warhead convoys between Burghfield and Coulport. Initially, when the new Foden articulated trucks were introduced in July '92 there was a real push to get the new Trident warheads delivered to Coulport in time for the Trident submarine fleet becoming operational. At the same time, old Chevaline warheads were brought south for dismantling⁴. For instance there were ten trips to Coulport in 1993. Once most of the Trident stockpile was either loaded on submarines or stored in the bunkers at Coulport, frequency decreased and for a few years up to 2005 there were 2-6 convoys a year, whereas currently there is a convoy approx' every 6 to 8 weeks.

The convoys take warheads back to Burghfield for checking on how the components are ageing and coping with exposure to the radioactive elements contained within them, and deliver the occasional new replacement warhead to keep AWE's warhead building skills honed!

Before continuous running the routine was for convoys to take three days to travel north, and then after a number of days in Coulport loading and unloading, another three days to travel south again. (At that time the convoy vehicles were garaged at RAF Wittering so there was often another day either side when the convoys were getting back and forward from there to AWE). The overnight stopping places for these Coulport trips were RAF Wittering and Albermarle Barracks, or CAD Longtown.

In July 2003 convoys started using RAF Leeming as a stopover instead of Albermarle. In November and December that year the Burghfield to Leeming stage was done in one day. In 2004 three-day trips using Albermarle resumed but by the middle of the year everything was changing. Leeming was back in use and two-day trips were back. But, markedly, the long established commitment to only travelling during daylight hours was abandoned.

In March 2002 Ministry of Defence Police (MDP) took over control of warhead transport from the RAF. With the MoD's move in 2005 to running Burghfield/Aldermaston to Coulport as a continuous trip, the MDP have been tasked to achieve what the RAF could not or would not perform: continuous and dark running. Nukewatch has been monitoring and tracking these changes and continues to do so despite the challenges one-day runs pose. Stop-off places on route for a brief break and/or crew change have been changeable and new military establishments being used for a break on route. These have included, Fulwood Barracks in Preston, Weeton Camp near Blackpool, MoD Stafford, Chetwynd Barracks in Nottingham, MoD Kineton Warks, and in Nov 2007 getting lost on the way to a stop-off point at DSDA Forthside, Stirling. With these changes, many new councils find they have nuclear warheads passing through their authorities.

Nukewatch will continue to track and monitor these changes to convoys and pass on new information as it becomes available.

Risks of Continuous Running

Nukewatch's experience of daylight runs leads us to consider that the stress on crew engaged in this nuclear transport operation is significant, especially when a breakdown occurs and the journey time is extended. There can be a sense of personal vulnerability in open spaces and uncertainty of how the problem will be resolved. Training on a military base with unladen trucks does not prepare crews fully for a breakdown or accident on the road in darkness which would add a further layer of stress. Training for the 500 mile journey may give a false sense of security and road traffic accidents remain the greatest hazard.

⁴Chevalines were taken to RAF Honington in East Anglia for storage so that dismantling could wait until the Trident warheads were all

Although quieter at night there are increased risks in the dark particularly in bad weather. We understand that the motorcycle outriders are withdrawn from driving in the dark in severe weather conditions.

With changes in route and stop-off places, many new communities are being affected.

MoD documents released under the Freedom of Information Act say that the change to continuous running, "if inadequately conceived or implemented, would have the potential to create a significant hazard to the operation"⁵. Dangers cited included poor visibility at night, tiredness and getting lost (something the convoy, or part of it, did twice in 2007).

Sharing Information

Although we think that the Governments 'war against terrorism' is largely a hyped up excuse to erode civil liberties and induce fear into the general public we still think that its important that Nukewatch is not seen to be helping potential terrorists.

Whilst most information can be freely circulated within Nukewatch networks we agreed at a Nukewatch meeting not to put technical information on the websites such as vehicle number plates and short break locations in lay-bys. We only put out convoy movements in advance to our own network. This also means that we would not alert the media in advance (or while a convoy was on the road), except to contact known and trusted journalists who might come along to report a convoy passing.

⁵http://www.robedwards.com/2005/07/nuclear_convoy_.html
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Section 3 Nuclear Warhead Convoy Routes



Tracking and Monitoring

Over the years Nukewatch has learned a great deal about the nuclear warhead convoys by following and observing them. Below are some suggestions for making tracking and monitoring easier.

Tracking the Convoy with a Vehicle

Notice of a convoy coming your way can be very short so always be prepared. Tracking is best done with at least two people in the car; one to concentrate on driving and one to watch and record what the convoy is up to and make the phone calls, so work out in advance who is available to go with you.

Car

- Fuel Make sure you always have some (preferably a full-ish tank, especially if it's late at night!)
- Road worthiness Because of the increased risk of being stopped on a 'routine vehicle check'
 whilst out Nukewatching check your car over for any defects. Obviously you want tyres, brakes
 and lights in working order, however when the police want to waste time they can start nitpicking about things like whether the number plate had been cleaned that morning!
- Documents -You can carry them with you, but it often avoids delays (if the police stop you) to get a seven day ticket to produce them later. However, if you're driving a car which is insured but doesn't mention you by name, it can be useful to have the documents (or a copy of them)

Equipment

- Road maps
- Camera with charged batteries
- Binoculars if you have them
- Clipboard, paper and pen(s)
- Munchies and something to drink, in case the convoy breaks down, miles from anywhere!

Communications

- A mobile phone is essential these days for keeping in touch. Make sure it is always charged or get a car charger, and make sure you have some credit.
- Hands-free set required by law if you need to make mobile calls while driving alone
- Phone numbers keep the Regional Contacts list in your car. Store a few essential numbers into your mobile for emergencies. Make sure the person co-ordinating the phone tree has your mobile number too.

Protesting

Consider putting posters on your car to let other road users know what we are protesting about
and help us spot each other. It also makes clear to the police that our intentions are peaceful. A
large clear banner is always handy in case the convoy stops somewhere, especially if the local
press turn up. Tie strings to the corners so it can be fixed to something and you have your hands
free for taking pictures etc. Have leaflets for handing out anywhere.

Monitoring from a Roadside Vantage Point

There are often times when we think a convoy is out, but information is sketchy and we need people to go and look for it. Pick a spot where you can see the road comfortably, ideally from your car. The convoy vehicles usually drive with their lights on, so look out for a lead minibus possibly several miles ahead of the rest of the convoy, (and each vehicle has a single green light at the top of the cab on the drivers side - nothing else on the roads has this). A radio or tape/CD player can help to while away the time without being distracted from the road. Again there is an advantage in having two people, allowing one to take a break.

Recording and Reporting In

Keep a note of as much detail as you can: time, location, direction of travel, number of trucks, speed. Phone one of the network contacts as soon as you can after you've seen it. If you are on the Nukewatch e-mail list its always useful to pass on a personal account of any information by e-mail when you get home.

Communications

IF YOU SEE A CONVOY CALL:

0845 45 88 364 or 0788 055 7035 (South) 0845 45 88 365 or 0797 209 6499 (North)

Joining the Network

There are local phone trees up and down the routes which might include a local email list and/or sms list. If you are not on a phone tree and are interested in being added then please contact one of the following Regional Contacts for your area:

| South | Di | 0845 45 88 364 | di@nuclearinfo.org |
|-------|--------|----------------|---------------------------|
| West | Alison | 01785 611768 | alison.crane@ntlworld.com |
| East | Sarah | 01274 730795 | • |
| North | Roz | 0845 45 88 365 | scotland@nukewatch.org.uk |

- South covers Burghfield/Aldermaston to Birmingham on the west route and to Wittering on the East route
- · West covers Birmingham to Cumbria and Scottish border
- East covers Wittering to Cumbria and Scottish border
- North covers Cumbria and Scottish border to Coulport

Email Lists

The national Nukewatch e-mail list is for people actively engaged in Nukewatching. Again your Regional Contact can pass your details to the list moderators if you want to join the list.

There is another email list called the Nukewatch Update list, which anyone can join whether actively Nukewatching or not. It can be joined via the website or by emailing nukewatch-update-subscribe@nukewatch.org.uk The list alerts people of when a convoy has recently completed a full journey. Anyone wanting to stop nuclear warhead convoys is encouraged to use the info on this list in campaigning, such as writing to MP's or local authorities to alert them of when a convoy has passed through their constituency or stopped nearby.

Meetings

There are virtual meetings on the internet from time to time. These will be advertised on the e-mail list along with instructions for joining. You don't need any special software and can join from any computer logged on to the internet. Regions sometimes also have their own meetings.

Information and Advice

Contact Nukewatch UK on email spotters@nukewatch.org.uk for information/advice on:

- Enquiries and communications
- Local contacts
- NVDA Workshops

Suggestions for Local Campaigning

This is about raising public awareness and understanding, registering Nuclear Warhead Convoys as an issue of concern with local elected representatives and official bodies, and building a local network for monitoring, tracking, protesting and lobbying.

Each locality is unique. Things work in one place that don't in another. These ideas are not separate initiatives, they all feed into each other and there is no priority order in the listing.

Join the Nukewatch Update Email List – This will allow you to alert elected representatives, Local Authorities and other official bodies of when a convoy has been on the road. You can join the list by emailing nukewatch-update-subscribe@nukewatch.org.uk

Get into **Dialogue with Local Authorities** over the additional risks caused by "continuous running". The enclosed Model letter to Emergency Planning Officers (EPO) is a good start in the current situation.

Local Authorities along convoy routes and near fixed sites, in co-operation with the Ministry of Defence (MoD), are required to make contingency plans to deal with a nuclear accident. The MoD issues Local Authorities Emergency Services Information (LAESI) Guidelines to cover emergency arrangements for road accidents involving the transport of nuclear weapons, nuclear materials and new fuel for nuclear submarines.

It is unlikely that local planners will have adequately addressed the long-term consequences of the contamination of land and property, in the event of a nuclear transport accident. Local Authorities and the Emergency Services are not forewarned of nuclear convoy movements within their area, whether on land, sea or air.

Under the LAESI guidelines, Local Authorities and the Emergency Services are asked to commit themselves to provide a service and level of care that they cannot actually deliver - inviting litigation against them from injured parties.

Along with contacting the EPO it would be advisable to make parallel contact with local elected members (check whether local council is a member of Nuclear Free Local Authorities) and member(s) of parliament. Offer them briefings and updates. Note that many Local Authorities have only part-time Emergency Planning Officers.

Dialogue with **Other Local Official Bodies** may also be fruitful. Consider dropping into relevant fire stations, ask to speak to the duty officer and leave some leaflets. Contact the public/community health team on the local board. They may wish to be on an alert list. Write to all parish/community councils in the area offering a short presentation.

Marking the Routes – Displaying signs along the convoy route is an effective way to raise public awareness. Maybe add a safety warning to drive extra carefully in case nuclear warheads are on the road. Asking people to look out for convoys and to let Nukewatch know if they see one. Leaflets can be left at local truck stops so that lorry drivers can contact NW if they see a convoy. Display a map in the town centre showing which parts of the town are at risk.

Road-Side Protests - can be very effective in raising public awareness when a convoy is passing or is due. Simple message banners and placards will often give motorists a quickly and safely digested message.

Film Screenings – Organise a screening of the Camcorder Guerillas film about Nukewatch to raise awareness of the convoy passing through your community. The film includes interviews with grass roots activists, environmental journalists, and international disarmament experts as well as local authorities and fire services about the dangers and illegalities of this deadly cargo. The film can be used as an educational tool in schools and colleges. If you would like a speaker to come along to the screening that can be arranged. The film DVD includes an **Action Pack**, full of useful info and **Exhibition Materials** to accompany the screening and provides insight into an issue usually well hidden from the public. Leaflets about the film

are available for anyone who is able to help distribute the film within your local area, or to your local authority. For leaflets or to order a copy of the film contact **film@nukewatch.org.uk** or 0141 416 3161.

Nonviolent Direct Action - Protests against convoys may involve nonviolent direct action (NVDA). Convoy vehicles have been damaged by activists while parked up and at least one stopover site has had the attention of activists. More commonly, people have gone safely into the roadway and compelled a convoy to stop, allowing others to climb aboard.

We recommend that people who wish to engage in NVDA take part in a **Preparatory NVDA Workshop** and tap into the help and advice of experienced people. Advice should also be sought from Nukewatch about potential legal consequences. Court appearances can provide another good opportunity for raising public and official awareness.

Nukewatch Guidelines for NVDA:

- 1. Nothing should be thrown at a moving vehicle in a warhead convoy.
- 2. The action should be called off if road and weather conditions make it unsafe (when there is fog or ice or the road is waterlogged)
- 3. There has to be a visible roadside demonstration at the place where the action occurs to ensure the drivers know something might happen.
- 4. Actions should only be carried out where the convoy has to travel slowly at junctions, roundabouts through roadworks. You should never try to stop the convoy when it is travelling fast.
- 5. It is preferable that more than one person should do the action. Be aware of other vehicles on the road.

Local Media - All the above activities can lead to helpful coverage. One local paper recently went so far as to include the contact number for people to phone if they spotted a convoy. Local papers will also (on occasions) print your photographs so having a reasonable digital camera at roadside protests is advised. Local radio has also great potential. For a listing of local media see www.mediauk.com. Nukewatch has developed a list of things appropriate and inappropriate for dissemination by the media (including websites). See Appendix "Publishing guidelines".

Campaigning against the convoys will be more effective if there is a good meshing between local and national campaigning. Local groups are asked to feedback to the Nukewatch network not only information about the convoy but also progress (or otherwise!) in lobbying work and in other activities.



Convoy stopping in Stirling

Resources - www.nukewatch.org.uk

Websites and Pages:

Campaign

The Acronym Institute for Disarmament Diplomacy

Aldermaston Women's Peace Camp

BASIC: Beyond Trident

Block the Builders – Aldermaston Come Clean! Info on WMD worldwide

Campaign to Abolish Nuclear weapons (ICAN)

Nuclear Information Service

Scottish CND Stirling CND

Trident Ploughshares

UK CND Yorkshire CND http://www.stirlingcnd.org/ http://www.tridentploughshares.org/

http://www.blockthebuilders.org.uk/

http://www.cnduk.org/INFORM~1/convoys.htm

http://www.basicint.org/nuclear/beyondtrident/

http://www.nuclearinfo.org/transport/warhead.htm

http://www.comeclean.org.uk/ International

http://cndyorks.gn.apc.org/

http://www.banthebomb.org/

http://www.acronym.org.uk/

http://www.aldermaston.net/

http://www.icanw.org/

Lobbying

Lists your elected representatives

Contacting your MP

http://www.writetothem.com/ http://www.theyworkforyou.com/

Media

Media UK

http://www.mediauk.com

News

To keep up to date with recent news stories subscribe to:

Nukewatch RSS news feed

http://www.nukewatch.org.uk/news rss.php

"Road crash could set off nuclear blast" by Rob Edwards

http://www.newscientist.com/article/mg19125594.300-road-crash-could-set-off-nucl

Other reports by freelance journalist Rob Edwards

http://www.robedwards.com/nuclear_weapons/index.html

Official

Local Authority Emergency Services Information (LAESI) 5th Edition http://tinyurl.com/2fb2lw

The Radioactive Material (Road Transport) Regulations 2002 http://www.opsi.gov.uk/si/si2002/20021093.htm

Radiation Accident Management in the US

http://www.orau.gov/reacts/nuclear.htm

Background info on nuclear weapons

US Environmental Protection Agency – Understanding Radiation http://www.epa.gov/radiation/understand/index.html

Federation of American Scientists-nuclear weapons

http://www.fas.org/main/content.jsp?formAction=325&projectId=7

Further useful links

http://en.wikipedia.org/wiki/Nuclear weapons and the United Kingdom

Nuclear Warhead Convoy – Spotters Guide



Minibuses and Outriders*

Spare tractor Military land rover







3 to 5 Trident warhead load carriers











Military land rovers

Fire engine

Minibuses and outriders*









Mobile workshop

Breakdown truck Police car

Support coach

Usual Convoy Configuration

- There could be a number of motorcycle outriders who will change position throughout the convoy (*these outriders do not normally accompany the Convoy along motorways).
- Minibuses carrying the escort personnel will be in front and behind. An advance minibus may travel several miles ahead.
- There are usually between 3 and 5 warhead carriers. Military land rovers travel immediately in front and behind the carriers. The Spare tractor will be in front of them and the fire engine will follow, sometimes at a distance.
- The three support vehicles of Mobile Workshop & trailer, Breakdown Truck, and Support Coach travel some distance behind the main convoy. If the carriers are held up then these vehicles will wait several miles behind.
- All vehicles travel with lights on even in daytime. Each vehicle has a single green light at the top of the cab on the drivers side.



A Trident warhead load carrier

Nukewatch Network Contacts

Further Contacts to be Used when a Convoy is on the Move

If you see a convoy unexpectedly please call 0845 45 88 364 or 0845 45 88 365 first, but keep calling until you get to talk to someone!

When someone in the network knows a convoy is on the road, they will try and speak to at least one person from each of the other regions if the convoy looks like it could be heading their way. Whoever receives the message for their region then passes it onto their local phone tree. If they only get through to answer machines, then they will keep trying and make sure that they get through to someone in the region as soon as possible.

You can also use this list to make contact with other Nukewatchers in your area.

SOUTH (and Burghfield and Aldermaston)

Di 0845 45 88 364 m.07880 557035

Juliet 0784 135 1123 Karen 0118 962 4948

EAST

Sarah 01274 730795 (Yorkshire CND office)

m.0781 8411 823

Wittering

Barbara 01462 814186 m.0772 066 2576

A1 - Newcastle/ Albermarle

Andrew & Mike 0845 45 88 368

WEST

Alison 01785 611768 m.0788 697 2319

NORTH (and Coulport)

Roz & Mark 0845 45 88 365 m.0797 209 6499 Jane 0845 45 88 367 m.0777 826 7833