

## **The Khaki Dragon – Mapping Military Wales**

### **Towards a demilitarised Wales**

*Khaki Dragon* aims to provide an overview of the contribution of the human and natural resources of Wales to the preparation and waging of war. The information in this report is intended to be used to inform lobbying, campaigning and policy development for the demilitarisation of Wales. It can be used to

- Raise awareness of the extent to which the resources of Wales are used to contribute to war
- Inform decision making at British, Welsh Assembly Government and local government level on issues such as economic development; support for research; and regeneration packages
- Identify military and manufacturing sites which may be contributing to particular military actions
- Identify areas for further research

### **The scope of the report**

As the first phase of a continuing project, this report identifies and outlines the four key areas in which Wales contributes to military activity. Further phases of the project will continue to provide more detailed information on these areas. All information in this report, and future updates, can be found on the website of the all-Wales peace and justice network Cynefin y Werin:

[www.cynefinywerin.org](http://www.cynefinywerin.org)

#### *Land*

The land, air and sea around Wales is a vital training area for British military forces. This section lists the main Army, RAF and naval training areas, ranges and other sites.

#### *People*

Wales is one of the most important recruiting areas for the armed forces. This section outlines armed forces recruiting activities in Wales, especially those targeting children and young people.

#### *Knowledge*

Welsh universities contribute to key areas of the development of military technology. This section describes the main sources of British government funding for military research.

#### *Enterprise*

Companies supplying weapons and other essential military equipment are a significant part of the Welsh economy. This section lists companies in Wales working on weapons and other military production.

#### *A Demilitarised Wales*

This final section makes suggestions for lobbying and policy development for the redirection of Wales' resources from military to civilian activity.

#### *Toolkit*

This appendix lists sources for further information.

## Foreword

### A peaceful country?

It is sometimes said with pride that Wales is a small country which has never fought a war in its own name; never dominated another country or people by military force. Certainly Wales has a strong tradition of anti militarism, joined at times with the pacifist tradition of nonconformist religion and at other times with a tradition of anti imperialist solidarity. Even the nineteenth and twentieth century resurgence of national identity was accompanied by a strong element of pacifism and the desire to build a Wales which would be able to disassociate itself from the militarism of England.

Each year at the national Eisteddfod the assembled crowd is asked *A Oes Heddwch?* Is there peace? and the traditional affirmation *Oes, yes,* is returned. The young people of Urdd Gobaith Cymru send an annual message of goodwill to the children of the world. It isn't fanciful to think that this culture of peace genuinely affects the views of the people of Wales. A recent report in the Western Mail quoted market research from a drinks company, asking young people under 25: If you could have absolutely anything for Christmas, what would it be? 34% in Wales answered 'world peace', compared with fewer than 10% in Scotland and regions of England.

Yet we cannot ignore the fact that the resources of Wales are used every day for the military machine. Soldiers and pilots are recruited from the areas of high unemployment in the Valleys or from among promising young students. They are trained in the mountains and national parks of Wales in areas emptied of their former communities. Every day university and commercial researchers and innovators use their skills to develop new generations of weapons, delivery systems and military communications. Hundreds of technicians, mechanics and skilled workers of all kinds work on military contracts in large and small businesses across Wales.

In 1936, Saunders Lewis described what could have been a vision of the twentieth century, after his arrest for burning down the construction site of a bombing school on the Llŷn Peninsula:

“the main target of the bombing aeroplanes will be the destruction of cities, to burn them and to poison them, to turn the civilisation of centuries to ashes; to rain down, from the safety of the air, the most cruel death on women and children and unarmed men... These fleets of aeroplanes will be so numerous and powerful that the risk to the bombers themselves will be but small... They will be trained in cold blood; in a short time the art will become a habit; and when they land after completing the destruction of civilisation and committing the greatest crime in the history of God's creation, if anyone asks them 'Where were you trained?' the answer will be 'At Porth Neigwl in Llŷn, near Bardsey Island and the Way of Wales' Pilgrims and Saints”.

It is the hope of this report that more people in Wales will come to share this view of the misuse of the land, its people and talents.

## **Land**

The Ministry of Defence controls over 140 sites in Wales, including barracks and accommodation; training areas, ranges, depots, airfields, docks and communications facilities. In addition, Wales is known to the RAF as 'Low Flying Area 7', with all suitable airspace used for the training of jet fighter pilots.

### **The impact of military land use on communities**

Military land use has dispossessed communities, from the destruction of the historic farmhouse at Penyberth in the Llŷn Peninsula to make way for the World War II bombing school famously opposed by Saunders Lewis, to the removal of 53 farming communities when the Castlemartin range was established in 1938.

A more subtle dispossession is the denial of public access to large areas of Wales' countryside. Although the MoD has made moves to publicise access to walkers across its estates, access is inevitably severely restricted by the use of land for live firing and exercises. In Wales this applies particularly to the Castlemartin ranges, the largest area of MoD land in the country.

Military training areas and ranges also bring disruption through noise or temporary removal during weapons firing, military traffic on the roads, and the particularly disturbing effect of low flying jets.

### **The impact of military land use on the environment**

A Council for National Parks discussion paper identified a number of negative impacts of military presence in national parks, including damage to the landscape, monuments and wildlife from live firing; the degradation of the environment from heavy use by vehicles and personnel; and the tendency of military installations to grow, bringing more roads and other infrastructure to previously remote areas.

### ***Main holdings***

The list here catalogues briefly the following:

- Army training areas and ranges
- RAF airfields and other sites
- Naval bases and sites
- Armed forces accommodation
- Depots and other sites

Further details about activities at these sites will be added to the website.

#### *Army training areas and ranges*

The Army Training Estate Wales (ATE) was established in 1999 as part of the ATE UK, with its headquarters in Sennybridge. Army training areas cover around 44,600 acres (18,000 hectares) and are in use almost every day of the year by regular soldiers, Territorial Army soldiers and cadets. In addition to military field exercises and weapons training, the Infantry Training Centre (ITC) Wales based at Brecon trains personnel in a wide range of areas including tactics, sniper instruction and range management. The Centre trains around 2,700 staff a year and has a staff of 275 military and 250 civilian personnel.

Headquarters ATE Wales  
Sennybridge Camp, Brecon, Powys LD3 8PN  
Telephone: 01874 635599  
E-mail: [ATEWALES@senta.enta.net](mailto:ATEWALES@senta.enta.net)

Infantry Training Centre Wales  
Dering Lines  
Brecon LD3 7RA  
01874 613 662

**Sennybridge Army Field Training Centre**

Sennybridge, near Brecon, Powys 30,000 acres (12,150 hectares)  
This is the third largest training area in the UK. Within this site was the village of Cilcenni on Mynydd Epynt which was 'relocated' in 1943 under wartime powers. On its former site in 1989 an 'Eastern European' village was built at a cost of £7 million to train soldiers in fighting in built up areas.

**Kinmel Park Training Camp**

near Rhyl 6,500 acres (2,650 hectares)  
The area has accommodation for 250 troops; a small arms range; and a 'dry' training area – i.e. there is no live firing. It is also used as a base for adventure training in Snowdonia National Park.

**Caerwent Training Area**

near Newport 1,500 acres (600 hectares)  
The area includes a railway and road system for exercises and driver training.

**Castlemartin Ranges**

near Pembroke 5,900 acres (2390 hectares)  
A training area for live firing and manoeuvre of armoured vehicles. The firing area extends into the sea.

**Royal Artillery Range Manorbier**

Tenby 102 acre (41 hectares)  
A Close Air Defence training range. The exclusion area around the range due to danger from live firing extends for 220 square miles, including 13 miles out into the sea and 50,000 feet above into airspace.

**Penally Training Camp**

near Tenby approx 300 acres (125 hectares)  
Training centre and accommodation.

**Templeton Training Area**

near Tenby approx 300 acres (125 hectares)  
A disused airfield used for 'dry' training, helicopter and air defence exercises.

**Rogiet Moor Rifle Range**

near Caldicot  
There is a one mile danger area extending into the sea.

**Aberporth**

Aberporth, Ceredigion  
A range for trials of land, sea and air launched missiles. The site is managed by the part privatised company Qinetiq. Aberporth is also a communications site.

**Cwrt-y-Gollen Training Camp**

near Crickhowell

25 acres (60 hectares)

Cadet adventure training site.

**Joint Services Mountaineering Training Centre**

Ynys Môn

**Joint School for Adventure Training Instructors**

Llanwrst

*RAF Airfields and airspace***RAF Valley and Mona**

Ynys Môn

This station trains all RAF and Royal Navy jet pilots.

**Defence and Repair Agency (DARA) St Athan**

St Athan, Barry

DARA is the RAF's only maintenance unit, and has a budget of about £100 million a year. It employs approximately 1500 service personnel and 3,000 civilians. It also runs a Saturday Engineering Club for young people.

**RAF Sealand**

near Connahs Quay

Rifle range and gliding school.

**RAF Pembrey Sands**

Burry Port

Bombing and firing range.

**Fairbourne Resource and Initiative Training Centre**

Fairbourne, Gwynedd

The Centre is part of the RAF School of Physical Training.

**Airspace**

The 'usable area' of Low Flying Areas 7 and 9 which cover the whole of Wales amounts to 20,135 km<sup>2</sup> (7,774 square miles). This accounts for 11% of the total usable overland area of the UK Low Flying System.

Flying times in Wales between 2001 and 2004 averaged nearly 7,000 hours per year. Around 70% of this was by 'fixed wing' aeroplanes, the rest by helicopters. Between 1980 and 1991 there were 26 crashes of military aircraft in Wales.

*Naval Bases and sites***Defence Estates Pendine**

Carmarthen

The site is used for testing missiles, with facilities including test tracks for accelerating materials; a drop tower for dropping explosives; and a railway track impact range. The site is the UK and NATO European Regional Test Centre for small arms. There is also a 9km stretch of beach which can be used for air and parachute exercises.

**Wales University Royal Navy Unit**

HMS Express, Penarth Marina, Cardiff Bay

The unit trains students in navigation, seamanship and leadership skills.

**Pembroke Marine Salvage Depot**

Pembroke

*Depots and other sites*

**Defence Storage Distribution Centre Llangennech**

Llanelli, Carmarthenshire

**Defence Manufactures Council Kineton**

Sennybridge, Powys

**Sennybridge Temporary Compound**

Sennybridge, Powys

**Defence Procurement Agency Seismic Station**

Llanuwchllyn

Defence seismic stations can be used for monitoring nuclear weapons tests.

*Armed forces accommodation*

In recent years the Ministry of Defence has sold some of its housing stock in Wales, and the situation is likely to continue to change. However, at present there are 21 Service Family Accommodation sites in Wales, and 98 barracks. A list of these is available from Khaki Dragon.

## People

### Recruitment

Wales is one of the most important recruitment areas for the British armed forces. Around 8% of recruits annually come from Wales, although the country only has 5% of the population of Britain and Northern Ireland.

The annual budget for the Army Training and Recruitment Agency (ATRA) is between £600-700m from which ATRA is required to enlist about 15,000 recruits and to train a total of about 100,000 officers and soldiers. If approximately 8% of this budget is expended on those enlisting from Wales, this would imply that something in the region of £48 million per year is spent on the recruitment and training of military personnel from Wales.

The table below shows recruitment figures for the year April 2003 – March 2004. Clearly numbers will fluctuate, but the table gives an idea of the numbers involved and the distribution of recruitment both geographically and across the armed forces.

	Cardiff	Swansea	Wrexham	Total
Navy	29	73	74	176
Army	279	391	234	904
RAF	147	99	94	340
	<b>455</b>	<b>563</b>	<b>402</b>	<b>1420</b>

The armed forces prefer to talk about careers rather than recruitment. Recruitment offices and personnel are termed 'Armed Forces Careers Offices' and officers. Recruitment vacancies are also advertised in JobCentres. A computer search for catering jobs in West Wales, or motor mechanics in Swansea, for example, might list a number of jobs without naming the employer. Only when the jobseeker requests further details does it become clear that the job requires enlistment in the Armed Forces.

Army pay and training can be attractive, especially when compared with unskilled entry to other occupations. Army pay for new recruits is £11,700, but four years after completing training a private can expect pay from £16,800 to £18,800. In addition, as Army recruitment material is at pains to point out, 'You can't really compare directly with civilian salaries as the Army often pays your living costs'.

### *Territorial Army (TA)*

There are 23 Territorial Army (TA) units and one Royal Marines Reserve unit based in Wales, including combat, medical, engineering and communications units (See the list at the end of this section. Across Britain the reserve forces account for a quarter of the full numbers of the British Army. If recruitment to the Territorial Army is at the same rate as to the armed forces overall, a rough estimate of numbers of Territorial Army soldiers in Wales would be 3,500 – 4,000.

The Reserve Forces and Cadet Association Wales carries out recruitment and administration for all reserve and cadet forces in Wales. Details of major recruitment events in Wales can be found on their website.

[www.rfca-wales.org.uk](http://www.rfca-wales.org.uk) 0845 702 3930

The Territorial Army recruits people aged 17 – 32. Recruits sign up for three years, and commitment to training is usually about 27 days a year. Compulsory mobilisation is possible. Territorial Army soldiers receive the same daily rate of pay as regular soldiers (starting at about £30 a day but rising with longer service and for officers), plus an annual bonus starting at £330. Recruitment presents the Territorial Army as 'different, challenging and worthwhile', with benefits including camaraderie, social life, adventurous training and sports.

## **Young people**

The Army Training and Recruitment Agency (ATRA) has 61 Army Careers Advisors across Britain who work with schools and universities. Activities aimed at recruiting young people include:

*Attendance at school and university Careers Fairs and events.*

These often include adventurous away days and activities. There is a tendency for some schools to present these activities to pupils who are perceived as less academically able, sometimes as an alternative to a visit to a university.

Graduate recruitment is particularly important to the RAF as highly skilled recruits are in demand. In Wales, RAF recruitment officers are not often found in the Valleys or comprehensives; their time is focused mainly on universities and private schools. The level of support received by an undergraduate interested in joining the RAF is considerable. One recruitment officer described how he would maintain contact with all enquirers during their three years at university, 'nurturing and mentoring them, finding out how they are doing, how their finances are'.

University Officer Training Corps are a recruiting tool for attracting graduates into the armed forces. However, an informal estimate from within the Army training and Recruitment Agency suggested that only 20% of Army Cadets enter the Army after graduation. A more important purpose for the Corps according to one Army Careers Officer is to create 'an acceptable face of the Army on campus'.

*Youth activities*

The Ministry of Defence funds a number of programmes for disaffected young people. These include a Cadet Force outreach programme jointly funded by the Ministry of Defence, the Youth Justice Board, the Department for Education and Skills and others. Young offenders or those considered at risk of offending take part in a one day course followed by four days of residential adventure training.

The Armed Forces also provide youth activities free to schools to support the National Curriculum, under the name 'Pathfinder'. The Ministry of Defence considers these as "seed sowing", according to their website.

*Education grants for students in sixth form, Further Education colleges and Higher Education*

Grants of £1000 - £1,500 are offered to young people studying A levels or equivalent level vocational qualifications in a range of areas including maths, languages, construction and building trades, vehicle maintenance, catering, nursing and engineering.

The Army also provides grants to university students. Students receive £1,000 per year as well as being paid at Territorial Army rates for training undertaken while studying. On enlisting after graduation recruits receive an additional £3,000. The grant commits students to serving a minimum of three years in the army. However, those receiving a bursary with flying training from the RAF are contracted to the RAF for 12 years on graduation due to the huge financial investment represented by training.

*Cadet forces for children and young people*



There are approximately 7,000 young people aged 12 – 18 involved in 106 cadet units in Wales. The great majority of these (75) are Air Cadet units, but there are also 20 Naval units, 6 Army units and 5 combined units, all of which are attached to private schools.

The cadet forces offer training in simulated military exercises, rifle shooting, drill and platoon leadership skills. In addition it offers adventurous outdoor activities, first aid training, sports, and the opportunity to gain a Duke of Edinburgh award. Most activities are free. There is no commitment to join the armed forces.

*Air cadet force units in Wales*  
**www.aircadets.org**

HQ No 1 Welsh Wing Air Cadet Centre Caldicot Road Ely Cardiff CF5 5EH 01920 591242 whq_1welsh@lineone.net	HQ No 2 Welsh Wing Building 29a RAF SU Sealand Welsh Road Deeside CH5 2RD 01244 847 502 whq_2welsh@lineone.net	HQ No 3 Welsh Wing Territorial Army Centre, The Grange Westcross Swansea SA3 5AJ 01792 405 912 whq_3welsh@lineone.net
--	---	--

There is at least one air cadet unit in the following towns (addresses are available from the Khaki Dragon project):

Aberconwy	Blaenau Ffestiniog	Deeside	Maesteg	Porthcawl
Aberdare	Bridgend	Denbigh	Merthyr	Prestatyn
Abergavenny	Brynamman	Ebbw Vale	Mold	Rhyl
Aberkenfig	Caerleon	Eryri	Mountian Ash	Risca
Aberporth	Caerphilly	Flint	Neath	Ruthin
Aberystwyth	Caldicot	Haverfordwest	Newport	St Athan
Ammanford	Cardiff	Holyhead	Newotwn	Swansea
Anglesey	Carmarthen	Holywell	Penarth	Tenby
Ardudwy	Cefni	Kenfig Hill	Pencoed	Tredegar
Blaina	Cheptow	Knighton	Pembroke	Treorchy
Bangor	Chirk	Llandrindod	Pontardawe	Welshpool
Barry	Colwyn Bay	Llanelli	Pontclun	Whitland
Berwyn	Cowbridge	Llwchwr	Pontypridd	Wrexham
Blackwood	Cwmbran	Machen	Port Talbot	Ystrad Mynach

*Army cadet force (ACF) units in Wales*  
**www.armycadets.com**

Clwyd ACF Kinmel Park Camp near Rhyl LL18 5UU 01745 583 794 <a href="mailto:clwydacf@aol.com">clwydacf@aol.com</a>	Dyfed ACF TA Centre Murray Street Lanelli SA15 1BQ 01554 756 777	Glamorgan ACF TA Centre Heol West Plas Litchard Bridgend CF31 1PA 01656 657 593 <a href="mailto:3cdtbnrrw@glamacf.fsnet.co.uk">3cdtbnrrw@glamacf.fsnet.co.uk</a>
Gwent ACF A Block, Raglan Barracks Newport NP20 5GG 01633 267 077 <a href="mailto:gwentacf@tiscali.co.uk">gwentacf@tiscali.co.uk</a>	Gwynedd ACF The Drill Hall Bethesda LL57 3LY 01248 600 363	Powys ACF The Barracks Brecon LD3 7EA 01874 613 442 <a href="http://www.powysarmycadets.org.uk">www.powysarmycadets.org.uk</a>

*Sea cadet force (ACF) units in Wales*

**www.sea-cadets.org**

North West Area HQ Royal Naval Headquarters Merseyside East Brunswick Dock Liverpool L3 4DZ 0151 707 3444	South West Area HQ The Sea Cadets HMS Flying Fox Winterstoke Road Bristol BS3 2NS 0117 953 1991
---	---

There are sea cadet units in the following towns or districts (addresses are available from the Khaki Dragon project):

Aberystwyth	Conwy	Milford Haven	Port Talbot	Rhyl
Barry	Fishguard	Neath	Porthcawl	Swansea
Cardiff	Holyhead	Newport	Pwllheli	Tenby
Connah's Quay	Lanelli	Pembroke Dock	Rhondda	Torfaen

*Royal Marines Reserve*

HMS Cambria, Sully, near Barry

A satellite unit trains seamen in mine warfare in Swansea.

*Combined Cadet Force Units in Schools and Colleges*

Christ College Brecon Brecon LD3 8AF 01874 615 472	Monmouth School Almshouse Street Monmouth NP25 3XP 01600 713 143	St Brigid's School Plas yn Green Mold Road Denbighshire LL16 4BH 01745 815 228
Llandovery College Llandovery SA20 0EE 01550 723 000	Ruthin School Mold Road Ruthin LL15 1EE 01824 702 543	

*Armed Forces Careers Offices*

Aberystwyth	Park Road SY23 1PG	01970 610 148
Bangor	TA Centre, Glynne Road, LL57 1AH	01248 362 889
Cardiff	8 <sup>th</sup> Floor, South Gate Hse, 84 Wood Street, CF10 1GR	02920 726 826
Carmarthen	108 Lammas Street, SA31 3AP	01276 238 315
Haverford West	The Dalton CV Centre, Freemans Way SA61 1TN	01437 767 329
Merthyr Tydful	Bethesda Street, Georgetown CF47 8LF	01685 384 513
Newport	4/5 Kingsway NP20 1EX	01633 250 306
Pontypridd	8 Gelliwasted Road CF37 2BP	01443 402 189
Rhyl	The Drill Hall, John Street LL18 1PP	01745 334 224
Swansea	17/18 Castle Street SA1 1JF	01792 653362
Wrexham	Halkyn House, 21 Rhosddu Road LL11 1NF	01978 388 508



## Territorial Army Units

<b>ABERTILLERY</b> Combat (Artillery)	Cwmcottage Road, Abertillery NP3 1PP Tel: 01495 212500
<b>ABERYSTWYTH</b> TA Medical Services/ Officer	Boulevard St-Brieuc, Park Avenue, Aberystwyth SY23 1PH TA Medical Services Tel: 01970 623256 /029 2056 2291
<b>BRIDGEND</b> TA Medical Services/ Engineering	Litchard Cross, Bridgend CF31 1JT Tel: 01656 652715
<b>CAERNARFON</b> Combat (Infantry)/ TA Medical Services/Officer	The Barracks, Llanberis Road, Caernarfon LL5 2DE Infantry 01286 673057 TA Medical Services 029 2056 2291
<b>CARDIFF</b> TA Medical Services/ Combat (Infantry)/Logistics	Maindy Barracks, Whitchurch Road, Cardiff CF14 3YE TA Medical Services 029 2078 1214 Infantry 029 2078 1307 Logistics 029 2078 1251
<b>CARDIFF</b> Combat (Artillery)/ IT Comms/Specialist (Intelligence)	Morgan Street, Cardiff CF1 2FG Artillery 01633 840393 IT Comms 53 Signal Squadron 029 2045 2302 Intelligence 0117 986 2122
<b>CARDIFF</b> TA Medical Services/ Engineering	Gabalfa Avenue, Llandaff, Cardiff CF4 2HX TA Medical Services 029 2056 2291 / 2057 6215 Engineering 029 2056 2291
<b>CARMARTHEN</b> Logistics	Picton Barracks, Picton Terrace, Carmarthen SA31 3BS 01267 237 114
<b>COLWYN BAY</b> Combat (Infantry)/ TA Medical Services	Groes Road, Colwyn Bay LL29 8PU Infantry 01492 532304 TA Medical Services 029 2056 2291
<b>CRICKHOWELL</b> TA Medical Services	Cwrt-y-Gollen, Crickhowell, Powys NP8 1TH 01873 812256 /
<b>CWMBRAN</b> Engineering	Chapman House, Ty Coch Way, Cwmbran NP44 7HB 01633 868373 / 838006
<b>GORSEINON</b> Engineering	Einon House, Park Road, Gorseinon, SA4 2UR 01792 893595
<b>HAVERFORDWEST</b> Logistics	Dalton VC Centre, Freemans Way, Haverfordwest SA61 1TN 01437 763254
<b>MONMOUTH</b> Engineering	The Castle, Monmouth NP5 3BS 01600 712935
<b>MONMOUTH</b> Engineering	Vauxhall Camp, Monmouth NP5 3BS 01600 772362
<b>NEWPORT</b> TA Medical Services/ Combat (Artillery/SAS)/ Specialist (Band)	Raglan Barracks, Newport NP9 5XE TA Medical Services 01633 215950 / 029 2056 2291 Artillery 01633 840393 / 840443 SAS 01633 214061 Band 01633 265718
<b>QUEENSFERRY</b> Combat (Infantry)/ TA Medical Services	Harry Weale Hall, Station Road, Queensferry CH5 2TE Infantry 01244 816873 TA Medical Services 029 2056 2291
<b>PONTYPRIDD</b> Combat (Infantry)	The Broadway, Pontypridd CF37 1BW 01443 403095
<b>PRESTATYN</b> Engineering	Marine Road, Prestatyn LL19 7HA 01745 854860
<b>SWANSEA</b> TA Medical Services/ Combat (Infantry)	Alamein Road, Morfa, Swansea SA1 2HP TA Medical Services 01792 476495 Infantry 01792 476546
<b>SWANSEA</b> Logistics/Officer	The Grange, Blackpill, Swansea SA3 5AD Logistics 01792 401528 Officer 029 2034 0242
<b>SWANSEA</b> Engineering	John Chard VC House, Glamorgan Street, Swansea SA1 3SY 01792 459727
<b>WREXHAM</b> Combat (Infantry)/ Engineering	Hightown Barracks, Wrexham LL13 8RD Infantry 01978 316126 Engineering 01978 364711





## Knowledge

### Research funding

The British government spends around £2.6 billion a year on research and development (R&D), of which nearly 30% is spent by the Ministry of Defence on military research.

The Ministry of Defence's funding of military research is guided by a complex system of advisory groups related to both the Ministry of Defence and the Department of Trade and Industry which help to shape the research agenda. These groups are made up of representatives of both government and industry, including individuals from British Aerospace (BAE Systems) and Airbus, among others.

The main channels for British government funding of military research are:

- The Defence Science and Technology Laboratory (DSTL)
- The Joint Grants Scheme
- Partnerships between industry, universities and the MoD

Other sources of military funding for research include governments other than Britain; NATO; and British and international companies which may fund university posts as well as research programmes. This report focuses on British sources of funding. Information on other sources of funding will be publicised on the website.

#### *The Defence Science and Technology Laboratory (DSTL)*

The Defence Science and Technology Laboratory arose after the Defence Evaluation Research Agency (DERA) was divided into DSTL and the partly privatised QinetiQ. As well as employing its own research scientists, DSTL funds university research. QinetiQ also offers research contracts to universities and other companies, and provides scholarships for some science and technology students.

#### *The Joint Grants Scheme*

There are seven major research councils in Britain which channel government money into research of all kinds, including science, medical research and the social sciences and humanities. Under the Joint Grants Scheme, the Ministry of Defence joins with relevant research councils to fund research which it considers to have military relevance.

#### *Partnerships between industry, universities and the Ministry of Defence*

These partnerships are intended to foster the strategic development of British science and technology to supply what are perceived as the needs of the military. The following include Welsh universities:

##### - Defence and Aerospace Research Partnerships (DARPS)

There are more than 12 of these partnerships, focusing on different areas of research and each involving more than one university. Although they are industry-led, they are funded by the Engineering and Physical Sciences Research Council (EPSRC).

The University of Wales Swansea appears to be involved in two of these partnerships: one led by Rolls Royce researching advanced aero engine materials; and the other led by BAE Systems researching data and sensory fusion.

##### - Defence Technology Centres (DTC)

Three Defence Technology Centres have been established so far. The Ministry of Defence will provide each one with up to £5 million per year for 3-5 years, with the consortium of companies and universities which make up the Defence Technology Centre providing further funding.

Cardiff University is part of a Defence Technology Centre led by General Dynamics focusing on data and information fusion.

- University Technology Centre (UTC)

Rolls-Royce supports 20 University Technology Centres within British universities working on civilian and defence related technologies. Cardiff University is a partner in one of these Centres.

Research is a constantly changing area, as projects end and grants are received for new research. The table below is intended to give an idea of the scale of grants received and the type of research undertaken during a five year period.

### **British funding for Military research in Higher Education institutions in Wales**

2002 – 2005 (except \* 1999 – 2002)

	DSTL	Joint Grant	Total	Partnerships
UW Cardiff	584,000	430,000	1,014,000	DTC, UTC
UW Swansea	150,000*	235,000	385,000	DARP
UW Bangor	85,000	200,000	285,000	
UW Aberystwyth	20,000		20,000	
UW Glamorgan	20,000		20,000	
North East Wales Institute	7,000		7,000	
	<i>866,000</i>	<i>865,000</i>	<i>1,731,000</i>	

### **Cardiff University research awards 2000 – 2005**

DSTL

<i>Department</i>	<i>research</i>	<i>value £</i>
Biosciences	Ultrasound concentration cell for use with the metal clad leaky waveguide (MCLW) instrument.	30 000
Biosciences	Cell disruption in small volumes by ultrasonic cavitation.	71 616
Biosciences	Ultrasound disruption of vegetative bacterial cells and spores.	83 018
Biosciences	Development of methods for the concentration of bacteria and effecting bacteria wall contact in a flow liquid using ultrasonics.	37 488
Chemistry	Non-corrosive surface active catalysts in chemical weapons decontamination.	154 883



Engineering	Summarise the existing literature on blunt trauma.	40 000
Joint Grants Scheme		
Chemistry	Detection of chemical warfare agents.	304 666
Engineering	Wear process of worm gears.	79 238
	Total	800 909

**Aberystwyth University research awards 2000 – 2005**

The £20,000 grant received from the Defence Science Technology Laboratory referred to above funded a PhD studentship into 'Legged Surveillance Vehicle Locomotion over Uneven Ground'.

## **Military Industry**

### **Military production in Wales**

The Ministry of Defence spends approximately £100 million per year of taxpayers money in Wales on military procurement, and estimates there are 1,000 people working in the 'defence' field in Wales, not including those employed directly by the MoD at DARA. The cost of 'defence' jobs to the taxpayer is considerably higher than job creation in other areas: a recent Cardiff Businesses School study estimated the cost at over £10,000 per job per year. Even without detailed research it is plain that the impact of this level of spending in Wales on education, health, or the development of sustainable industry or agricultural diversification would have a huge impact on job creation.

However, it is not easy to define the true numbers of people involved or the extent of military production. Firstly, this is due to the nature of modern military systems - complex, highly technical and constantly evolving. A single missile system might require contributions from a range of specialist industries, including computing and electronics, optical engineering and specialist mechanical engineering. The operators of the missile system rely on sophisticated communications systems to receive information on the target and commands to fire.

In addition to weapons and communications systems, a huge range of equipment and materials is essential for armed forces to function: specialist vehicles on land, in the air and at sea; equipment for construction and energy supplies; security equipment; transport, food, and clothing. Equipment which at first sight might seem peripheral to the battlefield can be lethal, such as the bulldozers which were used in the 1991 Gulf war to bury alive Iraqi soldiers.

Secondly, it is relatively rare to find a company which supplies only military orders. Even companies whose main business is military production follow the trend for 'diversification', increasing profitability by selling to both military and civilian markets. Most technologies have civilian as well as military applications.

Thirdly, most companies do not advertise the names of their clients. This list focuses on companies supplying the British armed forces, but other customers listed on the companies' websites include NATO and the armed forces of the US and other countries. About 40% of British 'defence' production is for export, according to the Defence Manufacturers Association. Further research will investigate the non British customers of the companies listed here.

### **Companies in Wales supplying military contracts**

For all these reasons, the following directory is not definitive, but is intended as a starting point for further research. The first section lists 30 companies producing weapons, weapons systems, components for military equipment or communication systems. Most of these companies are either wholly concerned with military production, or produce a significant amount of their goods and services for military use. Four are among the top ten military companies in the world: British Aerospace Systems; EADS; General Dynamics and Thales.

The second section lists over 50 companies of widely varying types. They are listed here because they appear in the British Defence Equipment Catalogue which advertises potential suppliers of all kinds of equipment from weapons systems to food and office furniture. Companies listed here will have supplied military contracts at some time, but it should be noted that they do not necessarily have current military contracts. However, given the

importance of areas such as electronic and mechanical engineering, aerospace and fibre optics (for secure information systems) to the military, it is very likely that these companies will be working on military projects at times.

### **Wales Assembly Government Strategy**

Economic development is at the heart of the Wales Assembly Government's strategic plans. One of the primary instruments of economic policy in Wales is the Welsh Development Agency (WDA), which aims to create jobs; improve skills; and develop strong and safe communities.

WDA support for Welsh businesses includes

- securing European funding for projects
- providing capital through Finance Wales for small and medium sized businesses to grow
- business advice
- development of infrastructure for business development
- strengthening the role of further and higher education in economic development
- encouraging innovation and new technologies through initiatives such as the Technium programme to nurture new businesses

The WDA provides support to a wide range of innovative businesses, from organic foods and technologies for sustainability to high tech civilian enterprises. The Agency focuses on five key industries, including aerospace and electronics, two areas which are vital for military production. The increasingly inextricable links between civilian and military industries make it difficult at times to distinguish between developing businesses in Wales and providing support to military industries.

An example of this blurring of boundaries is the WDA's support for the development of a business park on former MoD land at Aberporth. Parc Aberporth is intended to be a centre of excellence for Unmanned Aerial Vehicles (UAVs), offering 'innovative companies, particularly those in defence and aerospace related industries the perfect environment in which to develop.' Although UAVs have some civilian applications, their military use for surveillance and perhaps weapons delivery is clear. The Defence Diversification Agency is one of the partners in the project. It is important to note that 'diversification' does not mean *conversion* from military work – only the widening of opportunities to civilian markets as well as military ones.

**Main companies in Wales  
supplying weapons, military systems, equipment and services**

	Company	Area	Summary	website	Address	Tel no
1	AB Connectors Ltd	Merthyr Tydfil	Connectors for industrial and military uses.	ttabconnectors.com	Abercynon, Mountain Ash CF45 4SF	01443 740 331
2	Advanced Electronics Ltd	Wrexham	Power conditioners.	aelgroup.co.uk	Advance Park, Wrexham LL14 3YR	01978 821 000
3	Ameter Prestolite Switch	Cardiff	Battery charging and equipment (Industrial and military).	powerandswitch products.com	Ipswich Road, Cardiff CF23 9XP	02920 496 763
4	AMS Training	Cwmbrân	Air and naval military training.	amsjv.com	Dundridge College, Tŷ Coch Way, Cwmbran NP44 7XX	01633 871 111
5	Ascent group Ltd	Monmouth	Insulating materials for stealth, camouflage and anti-radar.	theascentgroup.co.uk	The Granary, Watery Lane NP25 5AT	01600 772 023
6	Avon Marine	Lanelli	Combat raiding craft.	avonmarine.com	Dafen, Llanelli SA14 8NA	01554 882 000
7	BAE Systems RO Defence	Gwent	Air and sea combat systems.	baesystems.com	Glascoed, Usk NP15 1XL	01291 674 109
8	BCB International Ltd	Cardiff	Launchers, non lethal weapons, communications, surveillance, police, military and special forces training.	bcb.in.com	Clydesmuir Road, Industrial Estate, Cardiff CF24	0292043 3 700
9	British Airways Maintenance	Barry	Aerospace maintenance.		PO Box 747 CF62 3YA	01446 747 100
10	British Rototherm Co Ltd	Port Talbot	Measuring instruments. Nuclear clean pressure gauges for military applications.	rototherm.co.uk	Kenfig Industrial Estate, Margam, Port Talbot SA13 2P4	01656 740 551
11	CAV Aerospace Ltd	Cardiff	Airframe components for civilian and military transport planes.	cav-aerospace.net	Llantrisant Business Park CF72 8YW	
12	Coulthard Subsea	Cricieth	Military ship repair.		49 High St LL52 OEY	01766 523 176
13	DARA	Barry	Military & civilian aerospace maintenance and repair.	dara.mod.uk	St Athan, Barry Vale of Glamorgan CF62 4WA	01466 751 355
14	DARA	Flint	Electronics for radar,	dara.mod.uk	Sealand, Welsh	01244

	Company	Area	Summary	website	Address	Tel no
	Electronics		guided weapons and laser.		Road, Deeside, Flintshire CH5 2LS	847 745
15	Denis Ferranti Meters Ltd	Bangor	Aerospace; ordinance and pyrotechnics; field spares.	dfm-ltd.co.uk	Caernarfon Road, Bangor LL57 4SP	01248 370 370
16	DV Howells	Milford Haven	Chemical, biological and radiation incident response.	dvhowells.com	The MPSC, Milford Haven SA73 3AQ	01646 696 340
17	EADS Defence and Security Systems Ltd	Newport	Military satellite equipment; aerospace (air-to-air refuelling; Eurofighter); missile systems; Unmanned Aerial Vehicles for the UK armed forces.	eads.net	Queensway Meadows Industrial Estate NP9 0SS	01245 493 493
18	Eurostep Ltd	St Asaph	Software systems for information processing (NATO, MoD and others).	eurostep.com	Cwttir Lane, St Asaph LL17 0LQ	01745 582 008
19	Farm-Base Sports Ltd	Brecon	Guns up to 30mm.	farm-base.co.uk	Capel Farm, Llangorse, Brecon LD3 7UL	01874 658 519
20	General Dynamics	Newport	Communications and battlefield information systems.	generaldynamics.uk.com	Bryn Brithdir Units 3 and 4 Oakdale Business Park, Oakdale NP12 4AA	01495 236 300
21	Hawker Energy Products Ltd	Newport	Stored energy batteries for planes, tactical vehicles, submarines, missiles and guns.	enersysinc.com	Stephenson Street, Newport NP 19 4XJ	01633 277 673
22	Holyhead Marine Services Ltd	Holyhead	Offshore raiding craft.	holyhead.co.uk	Holyhead Group Newry Beach Yard, Holyhead LL65 1YB	01407 760 111
23	Huntingdon Fusion Techniques Ltd	Carmarthen	Welding.	huntingdonfusion.com	Stukeley Meadow, Burry Port SA16 0BU	01554 836 837
24	Irvin-GQ	Bridgend	Troop parachutes for assault operations and emergency escape; parachute retarders for combat jet landing and for delivery of missiles and torpedos.	irvingq.co.uk	Llangevior, Cardiff CF32 8PL	01656 727 000
25	Labtech	Prestatyn	Microwave technology.	intelek.plc.uk	Broadaxe Business Park, Prestatyn LD8 2UH	01544 260 093

	Company	Area	Summary	website	Address	Tel no
26	Quinetiq	Cardigan	Aerospace, weapons and communications systems.	quinetiq.com	Parcllyn, Aberporth, Cardigan SA43 2BU	08700 100 942
27	Remsdaq Ltd	Flint	Security systems.	remsdaq.co.uk	Deeside Industrial Estate, Deeside CH5 2NL	01244 499 969
28	Saygrove Electronics Ltd	Flint	Missile systems.	saygrove.co.uk	Brookhills Way, Catherall Industrial Estate, near Chester, Flintshire H7 3PS	01244 550 022
29	Spectrum Technologies plc	Bridgend	Laser wire for aerospace marking systems.	spectrumtech.com	Western Avenue, Bridgend CF313RT	01656 655 437
30	Terralogic Ltd	Cardiff	Laptops for rugged environments.	terralogic.co.uk	Ocean House, 20 Harrowby Street, Cardiff CF10 5GA	08707 415 533
31	Thales Optics	Denbigh	Night vision and related equipment.	thales-optics.co.uk	Glascoed Road, St Asaph, Denbighshire LL17 0LL	01745 588 000

### Other companies in Wales likely to undertake military contracts

#### Aerospace

	Company	Area	Summary	website	Address	Tel no
1	The Minton, Treharne and Davies group	Cardiff	Non destructive testing for aerospace.	minton.co.uk	Merton House, Croescadarn Close, Pentwyn, Cardiff CF23	02920 540 000
2	Total Filtration Ltd	Cardiff	Filtration for aerospace, marine and other applications.	totalfiltration.com	Ipswich Road, Cardiff CF3 7AQ	02920 497 612
3	Aircraft Maintenance Support Services Ltd	Bridgend	Aircraft maintenance.		Eagle House, Village Farm Industrial Estate, Pyle CF33 6NU	01656 743 700
4	Allied Aerosystems Ltd	Pontypridd	Maintenance, ground support equipment.	allied-aerosystems.com	Unit G1, Treforest Industrial Estate, Pontypridd CF37 5YL	01443 849 970
5	Eagle Airfield Equipment Ltd	Llanrwst	Airfield ground equipment.		Nebo Rd ll26 0SE	01492 642 201

#### Communications and Security

	<b>Company</b>	<b>Area</b>	<b>Summary</b>	<b>website</b>	<b>Address</b>	<b>Tel no</b>
1	Dragon Fire and Security Systems Ltd	Cardiff	Fire and security systems.	dragonfs.co.uk	Dragon House, Norwich Road, Cardiff CF23 9AB	02920 485 555
2	Securicor Information Systems Ltd	Cardiff	Information systems.	securicor.com/sis	Industrial Estate, Gwealod y Garth, Cardiff CF15 9JN	02920 810 999
3	Phonelink Installations Ltd	Swansea	Fibre optics and phone systems.	phonelink-inst.co.uk	94 Steny Road, Gowerton, Swansea SA4 3BW	01792 875 111
4	Bewater Ltd	Newport	Video security systems.	bewater.co.uk	Newport NP205XW	01633 821 000
5	Optical Services and Sales Ltd	Newport	Fibre optics.	ossLtd.com	Units 19 and 20, Enterprise Way, Newport NP202AQ	01633 222 245
6	Tecsec Europe Ltd	Pontypool	CCTV and security equipment.	tecseceurope.co.uk	7 Pavilion Industrial Estate, Pontnewydd, Pontypool Torfaen NP4 6NF	01495 752 882
7	EOS Electronics AV Ltd	Barry	Video applications including security and underwater.	eos-av.demon.co.uk.com	EOS House, Western Square, Barry CF63 2YF	01446 741 212
8	Lightdata Fibre Optic Comms Ltd	Pontypridd	Fibre optics.	lightdata.co.uk	Business Development Centre, Main Avenue, Treforest Industrial Estate, Pontypridd	01433 831 454
9	Powertech Electronic Components UK Ltd	Conwy	Computer hardware.	powertech.net	Unit 106 Ffordd Maelgwyn, Tre Marl Industrial Estate, Conwy LL31 9PN	01492 585 022
10	Pinacle Communication Systems Ltd	Rhyl	Fibre optics.	pinacL.com	Tyco Electronics UK Ltd, Kinmel Park, Bodelwyddon, Rhyl LL18 5TZ	01745 584 545

### **Electrical and Mechanical Engineering**

	<b>Company</b>	<b>Area</b>	<b>Summary</b>	<b>website</b>	<b>Address</b>	<b>Tel no</b>
1	C & P Engineering	Swansea	Electronics and security systems.	cpengineering.co.uk	Gorseinon Road,	01792 897 002

	Company	Area	Summary	website	Address	Tel no
	Services				Gorseinon, Swansea SA4 9GE	
2	Morganite Electrical Carbon Ltd	Swansea	Electrical carbon products.	morgancarbon.com	Upper Forest Way, Moriston SA6 8PP	01792 763 000
3	JW & E Morris and Son Ltd	Bridgend	Electrical and mechanical engineering.	jwmorris.co.uk	Morris ine Engineering, Brackla Industrial Estate, Brackla, Bridgend CF31 2AG	01656 650 680
4	Woodhead Connectivity Ltd	Ebbw Vale	Electrical and cable products for harsh environments; mobile computing.	woodheadconnectiv ity.com	Unit 9, Rassau Industrial Estate, Ebbw Vale NP23 5SD	01495 356 300
5	Ledwood Mechanical Engineering	Pembroke Dock	Mechanical engineering for oil and gas supply; marine radar and surveillance.	ledwood.co.uk	Waterloo Industrial Estate, Pembroke DockSA72 4RR	01646 623 600
6	Zarlink Semiconduc or	Newport	Semiconductors for communications.	zarlink.com	Mitel Business Park, Portskewett, Newport	02191 435 342
7	Labtech	Prestatyn	Microwave technology.	intelek.plc.uk	Broadaxe Business Park, Prestatyn LD8 2UH	01544 260 093
8	ITL Transmissio ns	Wrexham	Transmissions for construction and mining vehicles.	intrans.co.uk	Wrexham Industrial Estate LL13 9UF	01978 661 140
9	Wrexham Mineral Cables	Wrexham	Mineral insulation cables.	teeco.com	Wynnstay Technology Park, Ruabon, Wrexham LL14 6EN	01978 810 789
10	Midway Precision Engineering Co ltd	Caerphilly	Electronics.		Pontygwindy Industrial Estate CF38	02920 883 552
11	Wiltan Ltd	Pontypool	Transformer cores.	wiltan.co.uk	Ambassador Buildings, Pontenewydd Industrial Estate NP4 6Y	01495 750 711

### Hydraulics etc

	Company	Area	Summary	website	Address	Tel no
--	---------	------	---------	---------	---------	--------



	<b>Company</b>	<b>Area</b>	<b>Summary</b>	<b>website</b>	<b>Address</b>	<b>Tel no</b>
1	Rimer Alco Ltd	Cardiff	Air and gas dryers, oxygen concentrators.	rimeralco.co.uk	Cardiff Bay Business Centre, Titan road CF24 5EJ	
2	Turner Hydraulics Ltd	Port Talbot	Hydraulic supply and filtration.	turnerhydraulics.co.uk	Unit 3, Llewellyn Quay, Port Talbot SA13 1RF	01639 882 784
3	Tema Engineering Services Ltd	Cardiff	Heat and pressure equipment.	tema-engineering.co.uk	Coleridge Road, Leckwith Industrial Estate, Cardiff CF118BT	02920 640 606
4	Teddington Engineered Solutions Ltd	Swansea	Expansion joints and pipework.	tes.uk.com	Unit 1, Heol Cropin, Dafen Park, Llanelli SA14 8QW	01554 744 500
5	HCM (South Wales) Ltd	Neath	Hydraulic equipment repair.	hcmswales.co.uk	Tan-y-Rhiw Road, Resolven, Neath SA11 4NB	01639 711 345
6	Braithwaite Engineers Ltd	Newport	Water tanks.	braithwaite.co.uk	Neptune Works, Uskway, Newport NP20 2UY	01633 262 141
7	JJ Casting investments (Heat treatment) Ltd	Caerphilly	Heat treatment of metal.	jjcastings.co.uk	Caerphilly Business Park, Ban Road Caerphilly CF83 3EL	02920 887 837

### Other products and services

	<b>Company</b>	<b>Area</b>	<b>Summary</b>	<b>website</b>	<b>Address</b>	<b>Tel no</b>
1	Eurobond Ltd	Cardiff	Fire resistant panels and cladding.	eurobond.co.uk	Seawall Road, Tremorfa, Cardiff CF24 5TH	02920 473 473
2	Euroclad Ltd	Cardiff	Metal roofing, cladding.	euroclad.com	Wentloog Corporate Park, Wentloog Road Cardiff CF3 2ER	02920 790 722
3	Planeweighs Ltd	Swansea	Plane weighing service.	planeweighs.com	Unit 14 Oxwich Court, Valley Way, Swansea SA6 8RA	01792 310 566
4	Rollaclad Ltd	Swansea	Steel roofing and cladding.	rollaclad.com	Pontarddulais Road, Gorseinon, Swansea SA4 4FQ	01972 893 985
5	Hilf Supply Chains Solutions Ltd	Bridgend	Supply chain management training.	hilf.co.uk	3 Heol Bryncwytin, Pencoed, Bridgend CF35	0870 206 4314

	<b>Company</b>	<b>Area</b>	<b>Summary</b>	<b>website</b>	<b>Address</b>	<b>Tel no</b>
					5PX	
6	Beacons Products Ltd	Merthyr Tydfil	Buoyancy foam products.	beaconsproductsco.uk	Unit 10, EFI Industrial Estate, brecon Road, Merthyr Tydful CF47 8RB	10685 350 011
7	NMC (UK) Ltd	Tredegar	Insulation and refrigeration.	nmc-uk.com	Tafarnaubach Industrial Estate, Tredegar NP22 3AA	01495 713 266
8	Swiftplan Buildings	Neath	Semi permanent buildings.	wernick.co.uk	Unit1, Chosen Park, Central Avenue, Briton Ferry, Neath SA11 7AX	01639 825 940
9	A&M Generators Ltd	Carmarthen	Generators.	amgenerators.com	Gilfach y Rhew, Abergwili, Carmarthen SA32 7ER	01267 237 078
10	HB & Troll Climbing	Bangor	Climbing equipment.	hbclimbing.com	24 Llandegai industrial Estate, Bangor L57 4YH	
11	Contact Attachments	Newtown	Forklift attachments.	forklift-attachments.co.uk	Mochdre Industrial Estate, Newtown SY16 4LE	0800 0283 332
12	Makefast Ltd	Newtown	Marine hardware.	makefast.com	31 Mochdre Industrial Estate, Newtown, Powys SY16 4LE	01686 629 010
13	Ocean Dynamic International Ltd	Haverfordwest	Rigid inflatable boats.	ribworker.com	Ocean base, Catherine Street, St Davids, Pembrokeshire SA62 6RJ	01437 721 390
14	CAC Industrial Products Ltd	Milford Haven	Protective clothing and equipment.	cac-industrial.co.uk	Thornton Industrial Estate, Milford Haven, Pembrokeshire SA37 2RU	01646 692 626
15	Aquascan International Ltd	Newport	Underwater metal detection.	aquascan.co.uk	Hill Street, Newport NP20 1LZ	01633 254 829
16	John Liscombe Ltd	Newport	Protective equipment.	liscombe.co.uk	Mariner Way, Felnex Trading Estate, Newport NP19 4PQ	01633 284 11
17	Proctor Fencing Systems	Newport	Security fencing.	fencing-systems.co.uk	Pantglas Industrial Estate, Bedwas, Caerphilly CF83 8XD	0113 243 0531
18	Arbra Instruments	Wrexham	Mining accessories.	aslgroup.co.uk.com	Advance Park, Rhosymedre Wrexham LL14	01978 823 900

	Company	Area	Summary	website	Address	Tel no
					3JR	
19	Bearmach Plc	Caerphilly	Landrover supplies.	bearmach.com	Bearmach House, Unit 5, Pantglas Industrial Estate, Bedwas, Caerphilly CF83 8GE	02920 865 586
20	John A Sparks and Co Ltd	Caerphilly	Engines and generators.	a-sparks.com	Western Ind Est CF83 1BQ	02920 80 70 80
21	Nuaire Ltd	Caerphilly	Fans and ventilation.	nuaire.co.uk	Western Industrial Estate, Caerphilly CF83 1 NA	02920 885 911
22	Harp International Ltd	Pontypridd	Refrigeration and aerosol products.	harpintl.com	Gellihirion Industrial Estate, Pontypridd CF37 5SX	01433 842 255
23	Quinshield Ltd	Ammanford	Glass reinforced polyester buildings.	quinshield.com	Capel Hendre Industrial Estate, Ammanford, Carmarthenshire SA18 3SJ	01269 832 220
24	Vector Instruments	Rhyl	Windspeed and temperature instruments.	windspeed.co.uk	115 Marsh Road, Rhyl LL18 2AB	01745 350 700
25	B Dixon-Bate Ltd	Flint	Towing and trailers.	dixonbate.co.uk	Unit 45, First Avenue, Deeside Industrial Park CH5 2LG	01244 288 925

### Demilitarising Wales

#### Land for peace

- The armed forces and privatised companies contracting services to them should make public information about the nature of personnel training and weapons testing carried out at each training site.
- The Ministry of Defence should plan for a phased return of land taken from communities under wartime powers. This could include a programme to build sustainable low- impact houses which would enhance rural economies and act as a beacon for sustainable development.
- Public and civil society organisations should work together to press for an end to the practice of military low flying.
- Local authorities, national parks and the Welsh Assembly Government should ensure that

Welsh youth organisations enjoy the same level of access to adventure training facilities as cadet units.

### **Developing skills for peace in young people**

- Funding for cadet forces should be redirected to local authority Children and Youth Partnerships.
- Local authorities should not use the armed forces to deliver challenge and motivational activities to the most vulnerable and disadvantaged children in Wales. Instead, funding could be made available for alternative activities with, for example, the civilian fire and rescue services, the police, or voluntary, charity and international organisations.
- Where cadet forces exist, young people under 18 should not be involved in military training such as simulated military exercises or the use of weapons.
- Funding for armed forces education bursaries should be redirected to support education opportunities for the least advantaged young people to enter training in civilian technology, healthcare and public services.
- Schools in Wales should be encouraged to keep to a voluntary code which avoids the direction of recruitment activities towards young people under 18 by:
  - not hosting cadet forces in schools
  - not accepting education resources for use in the classroom from the armed forces
  - avoiding the linking of adventure and challenge activities with the armed forces through visits and residential training with the armed forces
  - ensuring that children who do not achieve academically are not targeted for recruitment
  - providing citizenship activities which strengthen understanding and skills in civilian peacebuilding

### *A culture of peace in higher education*

- Universities should publicise all sources of funding for military research to both staff, students and the public.
- Universities should cease to accept funding for military research.
- The Welsh Development Agency should fund a body to
  - strengthen civilian research partnerships and funding
  - advise universities on generating income from civilian applications of their research
  - found a Centre of Excellence in Welsh Higher Education in conflict resolution, civilian peacebuilding and technologies for peace.

## **Supporting civilian business in Wales**

- The Welsh Development Agency should
  - make transparent financial and other support to industries with a substantial military component to their work
  - make resources and recognition of achievement available to companies which convert from military to civilian products or services; or which end their dependence on military contracts
  - cease to provide financial support to companies with a military component to their work
- Industries in Wales, especially those in the aerospace, marine, electronic and mechanical engineering sectors, should be encouraged to sign up to a voluntary ethical code which excludes military contracts. This would enable companies to publicise to potential investors and employees that they accept only non-military contracts.

## **Toolkit**

The following are some useful sources of information for further research, in addition to the addresses given at the end of each section.

### **Freedom of Information**

Individuals can make a request for information under the Freedom of Information Act to public bodies such as the Ministry of Defence, local authorities and universities or colleges. There is a duty to provide information in many cases, regardless of the reasons for the enquiry.

In some cases these bodies have made information available on their website, with information on what types of requests can be made. The request does not have to specify that it is made under the Freedom of Information Act, but it will probably speed up your inquiry if it is. In some organisations the person with responsibility for Freedom of Information is known as the Data Protection officer. The MoD has its own Freedom of Information website (see below).

## **General information**

The Ministry of Defence

[www.mod.uk](http://www.mod.uk)  
[www.foi.mod.uk](http://www.foi.mod.uk)

The Celtic League

Monitors military activity in the Celtic countries.

[www.manxman.co/im/cleague](http://www.manxman.co/im/cleague)

## **Land**

Army Training Agency

[www.atra.mod.uk](http://www.atra.mod.uk)

*Walks on Ministry of Defence Land*

Booklet on access to MoD land, including Sennybridge and Castlemartin, with maps.

Available free from:

Defence Estates, St Georges House, Blakemore Drive, Sutton Coldfield B75 7RL

[Wendy.Molyneaux@de.mod.uk](mailto:Wendy.Molyneaux@de.mod.uk)

0121 311 3850

## **People**

Reserve Forces & Cadets Association Wales

[www.rfca-wales.organisation.uk](http://www.rfca-wales.organisation.uk)

Cadets

[www.armycadets.com](http://www.armycadets.com)

[www.aircadets.org](http://www.aircadets.org)

[www.sea-cadets.org](http://www.sea-cadets.org)

Army Careers

[www.army.mod.uk/careers](http://www.army.mod.uk/careers)

Territorial Army

[www.ta.mod.uk](http://www.ta.mod.uk)

## **Knowledge**

*Soldiers in the Laboratory*, by Chris Langley 2005

A very detailed and readable report on military funding for research in UK universities.

Available from Scientists for Global Responsibility (website or paper versions)

Scientists for Global Responsibility [www.sgr.orguk](http://www.sgr.orguk)  
PO Box 473, Folkstone, CT20 1GS

For information on research councils and partnerships funding research:

Office of Science and Technology	<a href="http://www.ost.gov.uk">www.ost.gov.uk</a>
Faraday Partnerships	<a href="http://www.faradaypartnerships.org.uk">www.faradaypartnerships.org.uk</a>
Defence Science and Technology Lab	<a href="http://www.dstl.gov.uk">www.dstl.gov.uk</a>
Engineering and Physical Science Research Council	<a href="http://www.epsrc.ac.uk">www.epsrc.ac.uk</a>
EU military research and development	<a href="http://www.researchresearch.com">www.researchresearch.com</a>
Foresight Panels (research strategy)	<a href="http://www.foresight.gov.uk">www.foresight.gov.uk</a>

## **Enterprise**

Department of Trade and Industry [www.dti.gov.uk](http://www.dti.gov.uk)  
Aviation Weekly for news of aviation shows [www.awgnet.com/conferences](http://www.awgnet.com/conferences)

Welsh Development Agency [www.wda.co.uk](http://www.wda.co.uk)  
Head Office, Plas Gwyndŵr, Kingsway, Cardiff CF10 3AH 08457 775 577

Finance Wales [www.financewales.co.uk](http://www.financewales.co.uk)

British Defence Equipment Catalogue [www.bdec-online.com](http://www.bdec-online.com)

Sites advertising defence jobs [www.jamjobs.co.uk](http://www.jamjobs.co.uk)  
[www.defencejobs.com](http://www.defencejobs.com)

Ethical Consumerism [www.ethicalconsumer.org](http://www.ethicalconsumer.org)  
[www.corporatewatch.org.uk](http://www.corporatewatch.org.uk)

For companies Annual Reports [www.companies-house.gov.uk](http://www.companies-house.gov.uk)  
Available for £3 per report from Companies House, Crown Way, Cardiff  
0870 333 3636

Defence Manufacturers Association [www.the-dma.organisation.uk](http://www.the-dma.organisation.uk)