

KEEP OUR FUTURE AFLOAT

A UNITE, GMB & LOCAL COMMUNITY LOBBY SUPPORTED BY FURNESS ENTERPRISE & NWDA



BRITAIN NEEDS A STRONG ROYAL NAVY TO PROTECT SEA LANES ON WHICH UK TRADE DEPENDS



**UP TO 8 ASTUTE SUBMARINES AND UP TO 4 SUCCESSOR SUBMARINES
ARE ESSENTIAL FOR SUSTAINING THE UK'S DEFENCE AND SECURITY**

**MORE THAN 13,000 JOBS AND 1,200 FIRMS IN ALMOST EVERY
PARLIAMENTARY CONSTITUENCY IN THE UK DEPEND ON
SUBMARINE ORDERS**

Strategy & Action Plan 2010-2012
www.navalshipbuilding.co.uk





WELCOME TO THE KEEP OUR FUTURE AFLOAT CAMPAIGN

Formed in March 2004, the trade union and community-led, non-political Keep Our Future Afloat Campaign (KOFAC) seeks to sustain the core workload at Barrow Shipyard which builds nuclear powered submarines and designs surface warships. Specific aims are to:

- Sustain and grow jobs in naval shipbuilding in north west England
- Secure full utilisation of the unique assets found in the north west region's naval shipbuilding industrial base and their supply chains
- Sustain naval ship/submarine design capability. 60% of UK's total capability is located in Barrow

Strong maritime forces are a core UK defence capability which has a vital role to deter and contain threats as much as to deliver lethal force where necessary.

There is a strong business case for up to 4 'Successor' to the Vanguard Class submarines to be progressed and for delivery of up to 8 Astute Class attack submarines to enable the Royal Navy to fulfil its tasks. At Birkenhead, construction of the future aircraft carrier deck and refit of RSA vessels is the core business of Cammell Laird shipyard.

The Strategic Defence and Security Review is welcomed as a framework for defining future capabilities and the next Defence Industrial Strategy.

The KOFAC Campaign has developed a unique approach towards influencing national defence procurement policy using the expertise of UNITE (Amicus), GMB, Cammell Laird, private sector businesses, Furness Enterprise and NWDA. We remain grateful for their support.

Terry Waiting Chairman, Keep Our Future Afloat Campaign

OUR KEY MESSAGES

"Maritime capabilities are not a luxury, they are a necessity for a global trading island." (First Sea Lord, 7 July 2010, RUSI Future Maritime Operations Conference)

The submarine industrial base supports 1,200 companies in almost every parliamentary constituency in the UK. At least 13,000 jobs are at risk if the Successor submarines are not built.

It would take around 17 years to design and build a nuclear powered submarine:

- If you don't exercise your submarine design and capability
 - If you don't exercise those specialist submarine build techniques
 - In short if you don't build submarines regularly, you haemorrhage the capability to build submarines quickly and at a significantly greater cost.
- A submarine platform life is typically 30 years
 - A production run lasts around 16 years for nuclear powered attack submarines (SSNs)
 - A production run lasts around 12 years for new nuclear powered deterrent carrying submarines (SSBNs)
 - Therefore we are looking at a design and production life cycle of 60 years future for the UK's submarine industrial base

To sustain Britain's capability to design and build nuclear submarines, a continuous drumbeat of activity is needed. The Government should fund up to 8 Astute Class (SSN) and the design and build of the 4 Vanguard Class Successor boats (SSBN). The submarine enterprise has been optimised in terms of its size and programme such that any small disruption to overall programme assumptions has the potential for a dramatic impact on the business, which rapidly becomes unsustainable from a SQEP⁽¹⁾ skills retention perspective. There are few opportunities for diversification to mitigate any downturn or hiatus in demand.

Industrial capability cannot easily be replaced. It cannot be switched on or off, or later reconstituted or adapted from capabilities drawn from other industries, in fact, 'The value of one additional boat, employing 2,000-3,000 people for 18-24 months is worth more to Barrow than any combination of diversification possibilities'⁽²⁾.

(1) Only suitably qualified and experienced people can work on nuclear submarines.

(2) Barrow Shipyard Study for Barrow Task Force, by PA Consulting Group, September 2003

THE KOFAC CAMPAIGN'S REPUTATION

KOFAC has a reputation for effective lobbying. Some of the Ministerial feedback received over the years is shown below:

"KOFAC has made valuable contributions to the Defence and Maritime Strategies in the past, it would be useful to hear their thoughts as we move forward ...my predecessors Lord Drayson and Baroness Taylor always found their input both useful and informative."

Minister for Defence Equipment and Support, 24 June 2009

"You do realise how effective you are"

Lord Drayson, September 2006

"KOFAC is one of the most effective defence lobbies I have come across"

Secretary of State for Defence, 2004

KOFAC TARGETS ALL POLITICAL PARTIES



VISION FOR 2012

- Design and build work for a nuclear powered successor submarine programme comprising up to 8 Astute Class nuclear powered attack submarines with three boats having been delivered into Royal Navy service and detailed design of successor underway
- Astute Class boats 4, 5, 6, 7 and 8 orders confirmed and underway
- A strengthened, less fragile national supply chain operating with Barrow as a hub for implementation of the MoD and industry's Submarine Enterprise Collaborative Agreement

VISION FOR 2020

- To realise Barrow's untapped potential identified by Rand Europe in 2005 and provide the mainstay of employment in Furness, offering good wages and employment prospects
- To continue to be the centre of excellence in nuclear submarine design, build, test and commissioning with a firm drumbeat of orders through to the 2030s
- To become a designer and builder of large complex surface warships
- To help overseas customers in conventional submarine construction

PROGRESS SINCE 2004

The main emphasis since 2004 has been to ensure that Barrow's key role in the design and build of nuclear powered submarines and surface warships is sustained along with its skills base. In 2004 employment was as low as 2,900. Employment by 2010 had reached 5,041 people, an increase of 2,141 or 73%

Currently Barrow Shipyard:

- Has orders for 4 Astute Class nuclear powered submarines, work has begun on Boat 5 and Boat 6 long lead funding
- Is designing a successor submarine to the Vanguard (Trident) Class of submarine to carry the existing strategic nuclear deterrent
- Is helping to deliver part of the Future Aircraft Carriers programme
- Is recruiting graduates, apprentices and technical specialists

BARROW SHIPYARD



Barrow shipyard has been managing the design, construction and commissioning of nuclear submarines since 1958. Barrow is the UK's only site integrating the detailed design and commissioning of nuclear reactors. Between 1992 and 2002, the Barrow workforce was reduced from 13,000 to 2,900. Since 2003, the UK government's commitment to the submarine programme has enabled a vibrant investment in nuclear capability at Barrow. In 2009, it had risen back to over 5,000. 'Ambush', boat 2 of the Astute Class, will contain the 27th nuclear power plant to be constructed and commissioned at Barrow.

The Astute submarine programme has given BAE Systems significant experience in design for modularisation in the submarine programme. The level of module outfit routinely used at Barrow is higher than the aspirations of (civil) reactor vendors. Extensive experience shows this allows significant pre-commissioning, making a significant risk reduction to the programme.

KOFACTS ABOUT BARROW SHIPYARD

1. BAE Systems Submarine Solutions is a submarine centre of excellence. It delivers unique capability to the Royal Navy. It is the largest private employer in Furness accounting for approximately 30% of the NW region's defence jobs. It is the only UK builder of submarines, employing circa 5,000 employees across a range of highly skilled and specialist disciplines, equipping it with a unique design and manufacturing capability.
2. Existing and future workload requirements include the Astute programme. It is the industry lead for the concept design of a successor to the Trident missile carrying Vanguard Class of nuclear deterrent submarines.
3. The supply chain spans the whole of the UK with over 1,200 suppliers. Nationally the first three Astute Class submarines will deliver £1.6bn into the supply chain. Hundreds of millions of pounds will be invested annually across the UK as more submarines are delivered.
4. Based on an assumed GVA per head of £55K, direct employment is responsible for giving £275million, indirect employment would account for a further £340million.
5. The company has approximately 87 core and 35 agency staff involved in the design of lower block sections for the new Queen Elizabeth class of aircraft carriers.
6. 152 graduates are employed along with 368 apprentices. Apprentice totals increased by 83 in September 2010.
7. The BAE Systems workforce has grown significantly since it fell to its lowest ever total and the company continues to recruit highly skilled people.
8. As Barrow is Furness' largest manufacturer and private sector employer, submarine construction is crucial to the economic success of the Travel to Work Area, contributing more than £200m/year in wages.

SHIPBUILDING PROGRAMMES AND THE STRATEGIC DEFENCE AND SECURITY REVIEW

Our key message is that the Government must invest in modernising the Royal Navy's capability by committing to a steady flow of orders for submarines and surface warships, to enable industry to have the confidence to invest in production facilities and skills and improve affordability.

A foreign policy led Strategic Defence and Security Review is underway along with a Comprehensive Spending Review. Severe budgetary pressures will dictate whether defence spending should stay the same or be reduced and by what amount. This will influence what naval investment can be delivered and when. It is crucial that decisions are capability led after which programmes and budgets are aligned.

TABLE 1: THE UK'S PLANNED NAVAL SHIPBUILDING PROGRAMME

| Platform Numbers | Description |
|------------------|--|
| 8 | Astute Attack Submarines |
| 4 | Successors to Vanguard Submarine |
| 2 | Future Aircraft Carriers |
| 6 - 8 | Type 45 Destroyers |
| 18 - 20 | Type 26 Future Surface Combatants |
| 10 - 12 | Maritime Afloat Reach Sustainability Ships |
| 1 | Future Landing Platform Helicopter Ship |
| 2 | Next Generation LPD Ships |

Source: Defence Industrial Strategy 2005 and White Paper 'The Future of the UK's Nuclear Deterrent 2006.'



“Barrow remains an untapped source of production capability and could likely play a significant role in the coming shipbuilding programme”.

(2005, Rand Europe advice to Ministry of Defence)



“The Government are committed to the maintenance of Britain’s nuclear deterrent”

(Secretary of State for Defence, 3 June 2010, Hansard Col.78W)



SUCCESSOR TO VANGUARD CLASS SUBMARINES

The Government are committed to the maintenance of Britain’s nuclear deterrent. The 2006 White Paper ‘The Future of the UK’s Nuclear Deterrent (Cm 6994) stated that the total procurement cost of the Vanguard Class successor deterrent capability, will be in the region of £15-20bn at 2006-7 prices for a 4 boat fleet made up as follows:

- £11-14bn The Submarine
- £ 2-3bn Refurbishment or replacement of warheads
- £ 2-3bn Infrastructure

In-service costs will be around 5% to 6% of the defence budget.

The concept phase for the successor submarines began in 2007. Expenditure in the period covered by the 2007 Comprehensive Spending Review on the future submarine programme is:

TABLE 2: EXPENDITURE ON SUCCESSOR 2007-2010

| ACTUAL | SPEND | PREDICTED |
|---------------|--------------|------------------|
| 2008-2009 £m | 2009-2010 £m | 2010-2011 £m |
| 140 | 290 | 350 |

(Source: Hansard 3 June 2010, Col.78W)



4 Successor Submarines sustain strategic capability

ASTUTE CLASS PROGRESS

- **Astute** - Was commissioned into the Royal Navy in August 2010
- **Ambush** - Test and commissioning of this second in class boat continues ahead of its scheduled launch later this year
- **Artful** - The Command Deck Module – the largest of the boat's modules has been shipped into third boat
- **Audacious** - Construction of major steelwork for fourth boat continues after its keel was laid in 2009
- **Boats 5 and 6** - Early construction has begun on Boat 5. The reactor core has been ordered for Boat 6

MODERNISING BRITAIN'S ATTACK AND DETERRENT

TRAFALGAR CLASS

ORDERED

LAUNCH

| | | |
|---|-----------|------|
| HMS Sceptre (S104) | Nov 1971 | 1976 |
| HMS Trafalgar (S107) | Apr 1977 | 1981 |
| HMS Turbulent (S87) | Jul 1978 | 1982 |
| HMS Tireless (S88) | Jul 1979 | 1984 |
| HMS Torbay (S90) | Jun 1981 | 1985 |
| HMS Trenchant (S91) | Mar 1983 | 1986 |
| HMS Talent (S92) | Sept 1984 | 1988 |
| HMS Triumph (S93) | Jan 1986 | 1991 |
| HMS Vanguard (S28) | Apr 1986 | 1992 |
| HMS Victorious (S29) | Oct 1997 | 1993 |
| HMS Vigilant (S30) | Dec 1990 | 1995 |
| HMS Vengeance (S31) | Jul 1992 | 1998 |
| HMS Astute (S119) | Mar 1997 | 2007 |
| HMS Ambush (S120) | Mar 1997 | - |
| HMS Artful (S121) | Mar 1997 | - |
| HMS Audacious (S122) | May 2007 | - |
| Boat 5 (S123) | July 2010 | |
| Boat 6 (S124) <small>Long lead Items only</small> | July 2010 | |
| Boat 7 (S125) | Awaited | |
| Boat 8 | Awaited | |
| Successor Boat 1 | Awaited | |
| Successor Boat 2 | Awaited | |
| Successor Boat 3 | Awaited | |
| Successor Boat 4 | Awaited | |



SUBMARINE FLEET BY REPLACING AGING BOATS

| COMMISSIONED | DECOMMISSION | LIFE |
|--------------|--------------|------|
| 1978 | 2010 | 34 |
| 1983 | 2009 | 28 |
| 1984 | 2011 | 29 |
| 1985 | 2013 | 29 |
| 1987 | 2017 | 32 |
| 1989 | 2019 | 33 |
| 1990 | 2021 | 33 |
| 1991 | 2022 | 31 |
| 1993 | 2024 | 32 |
| 1995 | - | - |
| 1997 | - | - |
| 1999 | - | - |
| 2010 | | |
| 2011 | | |
| 2012 | | |
| 2013 | | |

Submarines offer unique capabilities

"Submarines are the most sophisticated and flexible weapon that we have to exercise sea control"

Admiral Gary Roughead, US Navy 17 June 2009

"Astute Submarines can deter almost any other navy from putting to sea against us"

Bernard Jenkin MP (Harwich & Essex) Col 74, Hansard 21 June 2010



Class Submarine Rises

KOFAC'S STRATEGIC FOCUS

- Influencing Government budget, defence, industrial and skills policies and the advice their senior civil servants or consultants provide them with. We also seek to influence decisions of industry leaders, particularly through direct one to one meetings and participation in defence industry and party conferences.
- Urging Government to fully fund a naval shipbuilding programme so that the Royal Navy can sustain its strategic capability, including its ability to 'surge' forces in times of crises, by placing a steady drumbeat of orders for up to 8 Astute Class and 4 Successor nuclear powered strategic deterrent carrying submarines, so they can maintain continuously at sea patrols. RFA ships and surface warships should also be built in the NW's naval shipbuilding yards.
- Persuading politicians of all political parties, the Defence Industries Council, leaders of industry, national, regional and local community bodies and leaders of trade unions to support the KOFAC campaign objectives.
- Influencing the investment policies of major companies involved in the UK naval shipbuilding and submarine industrial base and its supply chain.
- Demonstrating productivity and affordability improvements being generated in the naval shipbuilding industry by the workforce, many of whom are trade union members.
- Persuading trade union leadership to support all the planned naval shipbuilding and submarine programmes, including the successor project.
- Clarifying what Ministry of Defence regard as 'complex' and 'less complex' warships.
- Demonstrating that the naval shipbuilding industry is equal to the aerospace sector in importance as an advanced engineering sector, providing employment and potential to help rebalance the economy.
- Promoting the importance of naval shipbuilding as a core part of the nation's defence industry at appropriate defence industry and political events



▲ KOFAC Chairman, BAE Systems, Rand Europe, UKTI DSO

KOFAC DEFENCE INDUSTRY NW 2010 CONFERENCE

▼ Industry and trade union delegates at the conference



KOFAC ACTION PLAN 2010–2012

- To advance KOFAC's mission distributing its messages efficiently.
- To support BAE Systems and their workforce in delivering up to 8 Astute Class submarines to the Royal Navy and up to 4 Successor to Vanguard Class submarines.
- To persuade Ministers and industry leaders of the need to sustain critical capability and skills in the naval shipbuilding industrial base by maintaining a steady drumbeat of orders. To also highlight the socio-economic and defence risks associated with workload gaps.
- Influence the foreign policy led Strategic Defence and Security Review and the Defence Industrial Strategy 2.
- Continue to seek clarification of likely funding resources available for warship and submarine building programmes through to 2025.
- Promote opportunities for Barrow shipyard to be used to support the delivery of design, build, test and commissioning of large nuclear powered submarines and complex warships.
- To influence the investment policy of BAE Systems and consolidation of the surface ships and submarine segments of the naval shipbuilding industrial base so that Barrow benefits.
- To set out the impact of possible defence budget and programme changes on employment at Barrow and Birkenhead.
- To push for all naval ship and submarine building to be undertaken in UK shipyards rather than by overseas design houses or shipyards.
- To continue to influence national trade unions policy so that they support continued investment in nuclear powered 'attack' and nuclear powered 'strategic deterrent carrying' submarine programmes.
- To help BAE Systems, Cammell Laird and their supply chains promote the career opportunities that high technology advanced shipbuilding systems engineering offers to people of all ages.
- To attend the Annual Conferences of the party in power.
- To continue to undertake research and dialogue with intermediaries to enable KOFAC to progress its aims and objectives based on a sound policy and information base, and integrate best lobby practice into delivery of the KOFAC Campaign.

THE ROYAL NAVY NEEDS 155MM NAVAL GUNS



BAE Global Combat Systems have designed and built a prototype 155mm naval gun. It should be retrofitted to Type 23 and Type 45 warships and incorporated into the planned Type 26 Future Surface Combatant.

Third generation maritime fire support developed in Barrow will give the Royal Navy enhanced land attack, air defence and expeditionary force capability without the need to source from Italy or the USA.

THE DEFENCE INDUSTRY IN THE NORTH WEST

North West England has one of the highest concentrations of defence equipment jobs in the UK. 17,000 jobs are directly dependent on MoD spending which puts the region third after the South East and South West.

We have more defence jobs than Yorkshire, North East England and Scotland combined, contributing greatly to the 305,000 people who work in the UK defence industry. (Source: UK Defence Statistics 2008)

The Ministry of Defence spends well over a billion pounds in the North West region every year - sustaining jobs, encouraging innovation and rewarding excellence.

The North West accounts for 13% of the UK's jobs in defence manufacturing. The region has a great pedigree in the aerospace, land and shipbuilding sector. Today at BAE Systems Warton, and Salmesbury near Preston, final assembly of the new Typhoon combat aircraft for the RAF takes place, UAV development is also occurring, whilst Woodford has the new Nimrod MRA4 maritime patrol aircraft assembly.

The North West is home to the UK's largest warship building yard at Barrow-in-Furness, where submarines are built for the Royal Navy. Current work there includes the new Astute Class of submarines, design of the Future Aircraft Carriers and successor submarines. Birkenhead's Cammell Laird are involved in naval shipbuilding, constructing the Future Aircraft Carriers. Barrow also has the resources to build the next generation of 155mm naval guns.

It is crucially important that the UK sustains sovereign capability to design, build, test and maintain through life nuclear submarines and other key defence equipment.

The North West has unique trial and test facilities in industry to assist operational training. These include the unique electronic warfare test range at RAF Spadeadam, Cumbria which is complemented by Eskmeals gun ranges in West Cumbria and Altcar. The region's topography assists RAF low flying training.



THE KOFAC SECRETARIAT'S ROLE SUPPORTING KOFAC'S CAMPAIGN

- Furness Enterprise Executive as the KOFAC Secretariat, acts as the accountable body for the management of the KOFAC Campaign finances.
- The Secretariat undertakes research, delivers targeted lobbying, PR and other actions that help support the Keep Our Future Afloat Campaign Committee in the delivery of its Strategy.
- The Keep Our Future Afloat Campaign is non-political. It aims to influence all political parties' policy on defence procurement and industry leaders.



KEEP OUR FUTURE AFLOAT

EVERY TIME A SUBMARINE IS ORDERED ALMOST EVERY PARLIAMENTARY CONSTITUENCY IN THE UK BENEFITS...

...60% of the equipment and work is undertaken by the submarine industrial supply chain before final assembly and delivery from Barrow

Regional Spend through Barrow Shipyard:
381 Suppliers
- £803m Spend Since 2004*

*Astute spends only



"More technology goes into a nuclear submarine than any other product on the planet"

...Barrow has "A level of technological expertise that I freely admit I did not know existed. A willingness by the workforce to be adaptable, flexible and to work with management -- something I'd been led to believe by Britain's recent industrial history was not possible. And an efficiency in production that again ran counter to much of what I imagined."

(Chris Blackhurst, Evening Standard, London - September 6 2010)

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