

## Prominent parliamentarians join forces with NDI

We are delighted to announce that three of the North of England's leading figures have agreed to become patrons of NDI.

Baroness Harris of Richmond lives in North Yorkshire and takes an interest in NDI companies in Yorkshire & The Humber.

Lord Burlison, a former Government spokesman on defence matters in the House of Lords lives in the North East and has a keen interest in the success of NDI subscribing member companies, who employ more than 8,500 people in the region.

Lord Clark of Windermere, who lives in the North West is a former Cabinet Minister and Labour defence spokesman. He is also Leader of the UK Delegation of the North Atlantic Assembly.

Speaking after the recent inaugural NDI patrons' lunch at the House of Commons, NDI Managing Director David Bowles said: "We are very proud to have the support of these three eminent parliamentarians. It is important that SMEs supplying into the defence and aerospace industries know they have the backing of such influential people; this support can sometimes make a big difference in the globally competitive world of defence contracting.

"I am sure their appointment will help reinforce NDI's reputation as a source of world-class supplier capability."



*David Bowles with NDI patrons Baroness Harris of Richmond & Lord Clark of Windermere pictured on Parliament Green after the inaugural patrons' lunch.*

*Inset: NDI patron Lord Burlison*

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### Northern Defence Industries – Mission

Collaborating to achieve growth with customers in new markets by being globally competitive in operations, technologies and knowledge.

NDI Ltd will achieve this through strategic alliances with the business community and the public sector including One NorthEast, Yorkshire Forward, the Ministry of Defence and key prime contractors.

[www.ndi.org.uk](http://www.ndi.org.uk)

## News from Yorkshire – by Robin Fox

### DLO

NDI has been on a mission to develop more contact and hopefully more business opportunity with the Defence Logistics Organisation.

Robin Fox and Mike Albans-Jackson have been working closely on a number of projects that have given a number of NDI companies an opportunity to express interest in business worth in excess of £15 million.

Fourteen companies are currently involved with these projects; some at expression of interest stage, others dealing with pre-qualification questionnaires, a few having submitted tenders and one company having received an order in the £100,000+ bracket.

The work to introduce companies to the DLO is continuing and any member with a specific aspiration to deal with the DLO should speak to Robin Fox.

### Alliance

The Humber Marine Alliance represents a significant capability in ship construction, repair and maintenance. The Alliance companies account for some 1,700 directly employed individuals and a further 1,500 indirectly dependent on their activity.

Yorkshire Forward asked NDI to assist the HMA with a project designed to



Robin Fox – NDI Business Development Manager (Yorkshire)

reintroduce their capability and capacity to the MoD and prime contractors dealing with naval ship construction.

So far the assistance provided by NDI has accounted for a number of the HMA companies being able to bid for work from the Royal Fleet Auxiliary and a number of Royal Navy requirements.

During a visit by Thales to the Humber a senior member of their management team admitted to being pleasantly surprised by the extent of the capability the area represents.

NDI has also been able to assist in the development of business opportunity from abroad, in particular, projects in South East Asia. *(Editor's note: see our feature on page 3)*

### Yorkshire

NDI continues to build a high quality collaborative network of SMEs in Yorkshire and the Humber. The membership in the region has now risen to some 80 companies.

This network is proving a valuable addition to NDI's overall capability and capacity and is a strong addition to the offering that NDI can market to the defence sector. Yorkshire companies are beginning to see real business accruing from their involvement with NDI and the benefits of the collaborative approach.

### Ground breaking NDI joins SBAC

As we went to press, it was confirmed that NDI has joined SBAC (the Society of British Aerospace Contractors) in a move that strengthens the partnership between the region and the national body for the aerospace industry.



NDI is the first regional organisation to join the SBAC – & there are real benefits for all NDI members. These include: 'hot-desk' facilities at SBAC's London offices; use of the SBAC logo on company letterheads & advertising & space on the SBAC website. More details from Gary Scott at NDI – tel: 0191 516 6680.

### Minister meets NDI members

Armed Forces Minister the Rt Hon Adam Ingram MP paid a visit to Durham on Feb 28 and met with NDI members to discuss a range of topical and pertinent issues.

More on these stories in the next edition of NDI News...



Pictured in Durham l-r: Alan Campbell MP, David Bowles NDI, Kevan Jones MP, Rt Hon Adam Ingram MP, Minister of State for the Armed Forces.

## NEW MEMBERS

We extend a warm welcome to the following new members, who have joined since publication of the last issue of NDI News:

- CRP Group Ltd
  - Dunlop Hiflex Fluidpower Ltd
  - Environmental Remediation Services Ltd
  - A & E Woodward Ltd
  - Point Engineering (Hull) Ltd
  - The Humber Electrical Engineering Co Ltd
  - Dunston (Shiprepairs) Limited
  - North Sea Ventilation Ltd
  - Yorkshire Marine Containers Ltd
  - Armstrong Hydraulic Services (Hull) Ltd
  - J.F. Appelbe & Co. Ltd
  - Andrew M Jackson Solicitors
  - Braham & Dixon (1985) Ltd
  - MMS Ship Repair & Dry Dock
  - Newcastle Tool & Gauge Ltd
  - Ritchey-id.com
  - Reliance Gear Co Ltd
  - Health & Safety Laboratory
  - Shipham Valves Ltd
  - Virtualis Limited
  - Caterform Ltd
  - QBM Precision
  - TMS Support Solutions Ltd
  - Tungum Ltd
  - Abbey Tool & Gauge
  - Edwin Trisk Ltd
  - FTL Seals Technology Ltd
  - K Home Engineering Ltd
  - Craftsman Tools Ltd
  - Glanford Control Systems Ltd
  - TWI Limited
  - Iconoclast Limited
  - Orwin Limited
  - Springer Rapid Industries Ltd
  - INSYS Ltd
- Full details at: [www.ndi.org.uk](http://www.ndi.org.uk)

## Major events in 2005

In recent years NDI has established a solid reputation for creating a real presence at THE biggest events and exhibitions in the defence and aerospace calendar.

As a group, we have successfully exhibited at the last two Farnborough Air Shows – in 2002 and 2004 – and also at DSEi in 2003.

2005 promises to be no exception, with planning well underway for probably the two biggest and most influential trade events of the year – The 46th Paris Air Show at Le Bourget in June, and DSEi in London's docklands in September. Our approach to each of these events is different.



### Come to Malaysia...

At the end of October, NDI hosted a visit by a high-level delegation from Malaysia, headed by the High Commissioner, Dato' Abd Aziz Mohammed.

The event – staged at Wetherby – was attended by representatives from a large number of NDI member companies, and they heard the High Commissioner invite them to play a major role in turning Malaysia into a powerhouse of the defence and aerospace industries.

Mr Mohammed told delegates: "Conditions are attractive for investment in Malaysia. We offer generous tax incentives and an annual economic growth rate of between 5 and 6 per cent.

"Malaysia is still a developing country, and we are now focussing very much on high value added industries which have applications in the civilian as well as the defence sector. We need to continue to be innovative in order to sell to the world market, and we regard the private sector as an engine for growth.

### Paris

For Paris, NDI is taking space on the 'UK Pavilion' in Hall 2B. The UK Pavilion is being organised by the Society of British Aerospace Companies (SBAC), and they will be handling booking etc. (There are a number of travel and exhibition grants available to qualifying companies). Hall 2B is the main exhibition hall at Le Bourget, and is directly opposite the main entrance to the Show, so couldn't be better placed for attracting interest from visitors. (Incidentally, the 2003 Paris Air Show attracted more than 94,000 visitors and 1,728 exhibitors, so you can gauge the significance of the event from those numbers alone).

### DSEi

As many members will already know, DSEi



"We recognise that here in Yorkshire and the North East of England you have a business culture that is characterised by a large base of dynamic SMEs. If you are looking to be competitive, expand your markets and become global players, then Malaysia is a good location, especially for companies operating in areas like manufacturing, component tooling, and software development.

"In Malaysia we are looking for greater partnerships with countries like Japan – and we are even talking of a free trade area with China".

A number of large UK companies, including Rolls Royce and BAE Systems already have established bases in Malaysia, and they are keen to use British expertise and components.

However, it is not just large international corporations that are represented there. In 2004, NDI member Technical Export & Marketing Services Ltd (TEAMS) carried out a preliminary fact-finding trip to Malaysia and fed the gathered intelligence back to the membership.

(Defence Systems & Equipment International) is the largest – and fastest-growing – tri-service exhibition in the world.

It is THE key event for the total supply chain and provides a platform for the whole of the defence and military communities.

Building on the success of our previous experience at DSEi, NDI will again have our own stand which will accommodate a number of member companies, each with their own dedicated display space – plus the benefits of members of the NDI team available throughout the entire event.

Demand for spaces at DSEi is sure to be high, so if you haven't already done so, please contact Gary Scott or David Kelly to reserve your space as soon as possible; it's first-come, first-served, so don't delay!

Scarborough-based NDI member Unison has already set up a sales and marketing outlet in the country. Unison's sales director Terry Pickering told NDI News: "Asia is a developing market that you can't ignore. With companies like Rolls Royce, Augusta Westland & BAE Systems all targeting the area, we decided that we have got to be out there earlier rather than later."

NDI had a market visit planned for February, but on advice from DESO this has now been delayed, possibly until April. Further details will be flagged up to NDI members via our regular electronic newsletter, NDI Bulletin. Anyone wanting more information is invited to contact Robin Fox ([robin.fox@ndi.org.uk](mailto:robin.fox@ndi.org.uk))



# Springwell sets its sights on NLAW

A visit to DSEi in 2001 has yielded big dividends for NDI member company Springwell Precision Engineering of Washington.

Springwell's managing director Phil Gatens travelled to the London docklands exhibition in order to see for himself what was going on and to see if he could pick up some new business leads in the process. Little did he know what a good investment his rail ticket to London would turn out to be...

NDI News spoke with Phil recently, and he takes up the story: "We weren't exhibiting at DSEi, but I knew that, like all NDI members, I had an 'open invitation' to visit the NDI stand and use it as a 'base' during my visit.

"While on the NDI stand, I spoke with Managing Director, David Bowles and he suggested that I

would be wise to go and see Roy Williams on the SAAB Bofors Dynamics stand. I took David's advice, told Roy all about Springwell, and he said to contact him again in a few weeks when he was due to be in the North East for a brief visit.

"I duly met Roy Williams again at the Station Hotel in Newcastle; he produced some drawings at that meeting and simply said 'Give us a quote'.

"The drawings were for components for what would be the sighting system assembly for NLAW. We submitted our proposals and waited. . .

"About 4 or 5 months later, I got a phone call from the people at SAAB. Before we knew it we were entertaining a delegation from SAAB at our site in Washington. We made a presentation to them and showed them around – and got some very good feedback as a result.

"SAAB Bofors Dynamics were in the process of putting together a team of UK

based contractors who would help them to win the order for the NLAW system from MoD, and we were subsequently invited to a number of team conferences, the first of which was held in Birmingham.

"It became clear from the outset that SAAB were particularly keen to direct work to small specialist companies such as ours – they were looking to develop 'clusters' in exactly the same way that NDI works so hard to promote.

"SAAB held a showcase event in London at which they described in detail to MPs and other interested parties how the NLAW offset programme would be managed, and they encouraged each participant to lobby their respective MPs.

"I spoke with Kevan Jones, Joyce Quin and Fraser Kemp and told them about our



NLAW

We asked Phil what this contract win means for Springwell, and his answer should act as real encouragement for any SME involved in tendering for work on a major defence contract.

He told us: "Our NLAW win will be worth about £1 million to us over the five year contract period. To put that in

perspective, we have a workforce of 11 people at Springwell Precision; this contract means work for at least 3 men for 5 years.

"The benefits of our involvement go beyond simply winning the contract from SAAB, however. Because of our interaction with other members of the NLAW cluster, we've

been getting enquiries from them for work on projects outside of the NLAW programme. We have also obtained orders from two parts of the Thales group, in Belfast and in Basingstoke. "This interaction is not all one-way traffic either: we have established a relationship with fellow NDI members, Micro Metalsmiths Ltd from North Yorkshire, who are providing us with specialised castings for our components. I went to see them some while ago, liked what I saw, and signed a supply agreement with them. Liam Todd and his team are good – very good".

NDI News spoke with Liam Todd at Micro

*"I was very pleased to hear the good news for Springwell Precision Engineering. I agree with you that it proves the approach adopted by NDI in the region is the correct one in allowing a company like yours to access defence work ..."*

Extract from a letter from Kevan Jones, MP for North Durham

involvement with the NLAW programme – and I have to say that they were unfailingly supportive of what we were doing.

"There were many changes in designs and amendments to components over a 2 year period and eventually came the news that the Government had indeed awarded the NLAW contract to SAAB Bofors Dynamics.

"To cut a long story short, just before Christmas I had the pleasure of going to the SAAB Bofors offices in Karlskoga, Sweden and I signed a five year agreement with them for Springwell to manufacture the sighting system brackets for NLAW".

Metalsmiths and he told us: "Our collaboration with Springwell sees us blending the best of both our companies to manufacture components that have unique demands. Our casting and machining knowledge allows Springwell to explore manufacturing techniques that will ultimately save a lot of time on the parts".

Phil Gatens again: "Involvement in NLAW has opened doors for Springwell. It's our first step on that particular ladder and I'm confident that we will be in a position to win more business in the future based on our experience of this programme.

"What really struck me about the SAAB philosophy is that they know and understand the circumstances under which SMEs like us operate; I think that large Scandinavian businesses are further down the road of sourcing parts and components from SMEs than their British counterparts, but I also feel that this



Springwell celebrates NLAW contract win. Pictured, left to right: Rickard Godlund (Procurement Officer, Saab Bofors Dynamics), Phil Gatens (Springwell Precision Engineering), Mats Fagerberg (Head of UK Programmes, Saab Bofors Dynamics), Peter Lovering (NDI), Christer Axelsson (Programme Manager NLAW Saab Bofors Dynamics)

situation will develop and improve markedly in the UK over the next few years.

"In short, I think that we are helping to prove that big is not always necessarily beautiful – small can be pretty good, too!"

## International Paint wins £2.4million Type 45 contract

Specialist coatings company International Paint has won a £2.4m contract to cover a fleet of Royal Navy ships.

The company, which employs 800 people at its Gateshead plant, has been selected as sole supplier for the Type 45 fleet of anti-air warfare destroyers that are expected to go into service in 2014.

The contract has been awarded for International Paint to cover the first six ships – with the possibility of winning a further contract to supply the last two vessels.

We spoke with International Paint's regional sales manager Colin Hickman who told us: "This award follows almost three years of negotiations on one of the most detailed and challenging military newbuilding tender processes that I and the military support team have ever been involved in.

"We won the contract following a very comprehensive review of all prospective coatings suppliers, and we won not just because of our ability to supply the advanced product technology required, but also because of the quality of our

services, our processes, and our people".

David Houston, head of procurement and logistics for BAE Systems Naval Ships said: "We are delighted to welcome International Paint to the Type 45 programme as our supplier of marine coatings.



Type 45 destroyer (courtesy of BAE Systems)

"They join a huge array of suppliers and partners who are all working together to deliver the Type 45 to the Royal Navy and make this extremely complex project a success."

Coatings supplied by International Paint

will include hi-tech low solar absorption paint and the branded Intersleek, a non-biocidal covering.

International Paint, part of the world-wide Akzo Nobel group, makes more than 30 million litres of paint each year at its Felling plant. Akzo, which turned over 13.1bn Euros in 2003, made a £4m investment in the Felling plant last year.

The Type 45 destroyers, which are built in sections by VT in Portsmouth before final assembly on the Clyde, will form the backbone of the Royal Navy's air defence fleet until 2040.

Regular readers will already know, of course, that a large number of other NDI member companies are expecting to benefit from contracts associated with the project. United Defense, an NDI Global Partner, has drawn up a list of 35 contractors who will work on development of the Mk 45 naval gun which it is hoped will arm the new destroyer fleet.

We will publish regular progress reports in future issues of NDI News.

# SHIPBUILDING FOR THE 21ST CENTURY – PROGRESS SINCE THE OCTOBER CONFERENCE

David Bowles – Managing Director, NDI Ltd



David Bowles, Managing Director NDI Ltd

Many readers of NDI News will know that in October we organised (in partnership with BNEA) a national conference entitled Naval Shipbuilding for the 21st Century.

As an event, the conference was a huge success, attracting high-profile speakers from every part of the industry. The conference was attended by more than 200 delegates who engaged in debate about how the UK's naval shipbuilding industry could – and would – respond to the challenges presented by the MoD's largest proposed naval shipbuilding programme since World War II.

There can be no doubt that the industry faces some extraordinary challenges over the next few years – and although there will be many tough decisions made along the way, the MoD's plans present us all with tremendous opportunities.

The sheer scale and scope of the proposals will impact on the entire industry supply chain, from the prime contractors right the way down to small specialist manufacturers and suppliers of services.

The impetus created by the conference continues to reverberate around

Whitehall, the Ministry of Defence and the industry – and much has happened since.

Soon after the event we heard that the MOD were seeking to appoint a 'physical integrator' that would be responsible to the customer for the management of the project to build two 60,000 tonne aircraft carriers.

We also heard that the MOD were undertaking a 'Maritime Coherence Study' tasked with developing ideas on the future of the industry and what structure is required to deliver on time and budget.

We also heard that there was a potential 'merger' of three or four of the biggest companies in the UK to create a new naval shipbuilding capability of rationalised capacity that could provide continuity into the future by winning export orders.

The facts are that Kellogg Brown and Root (KBR), a division of the US giant Halliburton, has won the contest as Physical Integrator of the carrier programme and it has been announced that the warships will be built at BAE Systems on the Clyde, Babcock at Rosyth, VT Group at Portsmouth and Swan Hunter on the Tyne.

We have now learned that BAE Systems and KBR have formed a joint venture company to build the carriers into which the VT Group and Babcock may be invited – but no mention of Swan Hunter, which is, of course, a concern for us in the North of England.

What is really important for you and I is that thousands of jobs are at stake – as is the future of manufacturing and engineering in the North of England if we do not secure a significant share of this

and several other projects to build ships for the Navy.

And we must not forget that we need to win a share of FRES, a programme worth up to £6 billion to provide a new fleet of fighting vehicles for the army.

The future for all companies that do business in the defence aerospace and marine sectors is about their ability to reconfigure their business models to enable them to collaborate and cooperate with erstwhile competitors to win and deliver on contracts that have extraordinary life cycles of 10 to 30 years.

There are some great examples of this already but we must win more business for small to medium companies if we are to build the future that was promised at the recent Labour Party conference at the Sage in Gateshead. 50 SME's creating 10 new jobs is another 500 employment opportunities that are sustainable in the long term and not globally mobile.

Much is at stake for this region and the whole of the North of England; shipbuilding is a serious catalyst for the future of an industry that has embraced new technology, new working practices and is already collaborating.



Lord Bach addressing the October conference

We are pleased to present here an article written for NDI News by Mr Vic Emery, Managing Director BAE Systems – Naval Ships, in which he offers his perspective on procurement issues and the way ahead...

## Moving Forwards – Evolution of the UK Naval Sector

By Vic Emery, Managing Director BAE Systems – Naval Ships

The UK naval sector has been receiving a lot of press coverage recently as commentators speculate on the likely strategy, structure and style of possible new marketplace arrangements. I am therefore delighted to have been asked to write this timely piece on the UK naval sector going forwards. I will confine my thoughts to procurement matters, though the issues facing my colleagues in the support arena are just as taxing.

Observers and practitioners alike will realise that the UK naval sector is at a challenging crossroads. The MoD is planning to embark upon the most wide-ranging warship acquisition programme for many years. However, due mainly to the volatile demand cycles experienced hitherto within the sector, the number of organisations now capable of undertaking design, integration, test and support of surface ships and submarines (and thereby deliver the future naval programme) has decreased considerably. The challenge is further compounded by ever increasing capability demands concurrent with ever-present downward pressures on the Defence Budget.

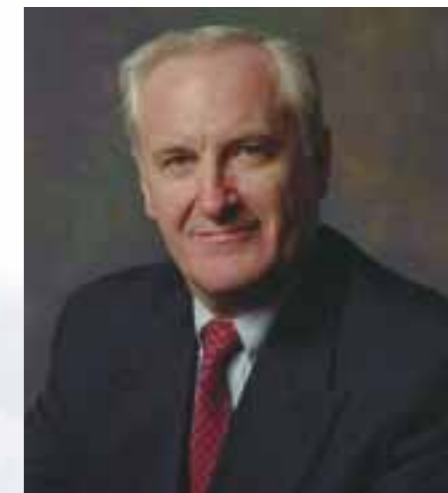
In such a market environment it is right to challenge whether conventional procurement strategies can furnish effective solutions that ensure the armed forces are provided with the equipment they require at best value to the taxpayer. As a general principle there is broad agreement that an integrated strategy which simultaneously accommodates demand-side (MoD) and supply-side (industry) considerations is required. MoD can rightly expect industry to deliver quality products, value for money, consistent on-

target performance and embrace a culture of continuous improvement and innovation. Shareholders can equally expect the fostering of a long-term, steady business that delivers a reasonable profit. The details remain to be defined though any new strategy may well include a revised contracting relationship and an optimised industrial architecture.

One potential outcome of industrial optimisation could be the emergence of consolidated, coherent and sustainable surface ship and submarine entities. The logical starting point for any such restructuring would be with the current major industrial players, as it is they who control all the essential core capabilities at the whole ship level. Notwithstanding, it is necessary to recognise that there are other players who also contribute to a successful naval sector and effective arrangements to ensure their continued contribution must be developed.

Furthermore, any naval sector strategy must recognise that the traditional shipbuilding activity is only a very limited aspect of the total effort involved in delivering the future fleet to the customer. For effective programme execution it is the skills of prime contracting, complex systems-of-systems integration, project and supply-chain management and systems proving that are to the fore. Accordingly, in any future marketplace the new industrial entities must operate at the Tier 1 level as total system-of-systems integrators.

Finally, the UK naval industry must recognise that it cannot grow by meeting domestic



Vic Emery, Managing Director BAE Systems – Naval Ships

requirements alone. There will be a need to enhance global competitiveness and to develop strategies that take account of the transition to an evolving international defence market.

The philosophy behind the development of an integrated strategy for the UK naval sector is entirely consistent with the Defence Industrial Policy (2002) and the rewards for its successful implementation are significant for both MoD and industry. The willingness is there on both sides and significant progress towards the ultimate goal has already been made. However, neither side can afford to fail, as the current arrangements are unsatisfactory for both parties. The forward programme offers us a unique and immediate opportunity to revolutionise the way we do business and we must be resolute in our determination to jointly deliver the best outcome.

### Imtech wins first contract on carriers

Marine engineering specialists Imtech Marine & Offshore Ltd of Billingham has become the first company in the UK to secure a contract from the £2.9bn aircraft carrier programme.

Imtech was recruited to design the HVAC (heating, ventilation & air-conditioning) systems for the Royal Navy's two new aircraft carriers, HMS Prince of Wales and HMS Queen Elizabeth.

The assessment phase contract is likely to lead to 'preferred partner status' with the Aircraft Carrier Alliance, and final development of the systems

will lead to six years of work for Imtech's 120-strong Billingham workforce.

A spokesman for Imtech told us: "The HVAC systems will include not only air filtration units, air treatment units, ventilation modules, exhaust fans, ductwork systems and air terminals, but also chilled water plant and an NBC (nuclear, biological & chemical) protection system. As work progresses we will be looking to use the talents and expertise of our UK supply chain". The Imtech group developed the ship management system for the £160 million Largs Bay & Lyme Bay amphibious landing ships currently under construction at Swan Hunter on Tyneside.

## XLedm

Stockton on Tees is home to an NDI member company that is, quite literally, at the 'cutting edge' of engineering technology.

XLedm specialises in electrical discharge machining, one of THE most accurate manufacturing processes available for creating simple or complex shapes and geometries within parts and assemblies.

The company has recently invested close to £250,000 in purchasing two new high-speed wire edm cutting machines, taking production capacity up to 9 machines in total.

Managing director Colin Thompson told NDI News: "Our investment is already bearing fruit. The introduction of the new Charmille edm cutting machines, plus our introduction of high-speed milling has helped us secure another 3-year contract manufacturing components for nuclear submarines. We have been developing our expertise over the last 4 years to perfect the cutting by edm of Hafnium and Zirconium materials.

"Additionally, we have just been awarded a substantial contract to supply edm-machined components to be incorporated in the new Airbus 800. This again follows a period of initial development work.

"Our policy of carefully planned and timely investment in equipment, coupled with our recent contract wins means even more job security for our workforce of 12 highly skilled and committed people. We operate on a 24/7 basis, our order books are very healthy and we are forecasting an increase in turnover on wire erosion work alone from £750,000 to about £1.2 million.



Setting up a large oilfield component in a typical edm machine

"We supply into a number of market sectors, among them aerospace, oil production and the medical industry. We currently produce over 40,000 components a month for the medical industry alone, and by this summer, that will rise to 50,000 per month".

## Responsive Engineering Ltd

Long-standing NDI member company Responsive Engineering has won a prestigious accolade at the National Training Awards.

The company (based on the Team Valley Trading Estate in Gateshead) won the award in recognition of implementing an outstanding staff development programme over a period of four years.

Peter Bernard, managing director of Responsive told us: "The development programme covered a period where the group was integrating a number of businesses. The commendation for the award noted how well we had performed in a highly competitive market while managing a complex programme of change."



The Responsive team receive their award from BBC's Wendy Gibson

The Responsive 'family' of companies comprises Weldex, Streamline, Pressex and Kingsway Precision, and produces chassis components and armoured panels for the defence industry.

It is one of a select list of 35 contractors in the region drawn up by US defence group United Defense to work on the Mk45 naval gun, a £300million project that aims to make the weapon for the Royal Navy's new Type 45 destroyers over a period of about 10 years.

Responsive - which turned over £5.5million last year - has also invested heavily in new equipment, spending more than £300,000 on a laser cutting machine and an additional £500,000 on water cutting equipment.

The company received their National Training Award from BBC television presenter Wendy Gibson at a ceremony in Newcastle's Civic Centre just before Christmas.

## MKW Engineering Ltd

NDI member company MKW Engineering has recently invested £700,000 in new equipment at its Ryton headquarters where it employs around 160 people.

We caught up with MKW's sales & commercial director Rahmon Nassor and we asked him to tell us about the company's new investment and how it came about.

"Our total investment comprises about £550,000 spent on a new precision manufacturing machine, with a further £150,000 being spent on training and tooling. We have been able to do this because we have recently secured a number of defence contracts in the fields of military communications and satellite components.

"Our new machining centre supplements earlier investments in high-tech equipment and systems and puts us in a strong position to consolidate our reputation as a leading provider of engineering solutions to both the defence and offshore markets.

As a company, MKW has come a long way in the 28 years since it was founded.

Rahmon told us: "We began as a small local engineering business, but as time has gone on we have been able to expand our horizons substantially. Now we find ourselves supplying equipment to no less than eight defence companies in the UK and throughout Europe.

"In recent times, much of our development in the defence sector has been achieved through our association with NDI. We have taken advantage of NDI's presence at exhibitions such as the Farnborough Airshow last summer, which was a great success for us, repaying our involvement handsomely."

We asked Rahmon to tell us more about MKW's business mix: "The defence and offshore industries represent a major part of our current business, and they will continue to do so for some time into the future. These days, we're not only involved in component manufacture, but are heavily involved in design work, manufacture, assembly and testing. Also, we are now involved in the maintenance of naval equipment."

We also spoke to Ian Young, MKW's managing director, who confirmed Rahmon Nassor's assessment of the buoyant state of business in Ryton. Ian told us: "We are at a stage now where we

can confidently rise to meet the demands of sometimes very challenging projects.

"For example, not long ago we completed our biggest-ever export order, a deal to supply the Turkish army with 19 'box bodies' for use on Land Rover-type vehicles to house portable satellite communications systems. The specifications were demanding: our product had to be watertight, sealed against electromagnetic charges and partially soundproofed to meet the requirements of the armed forces. I'm pleased to say that we completed the £300,000 contract entirely to the clients satisfaction".

## Claro Precision Engineering Ltd

NDI member Claro Precision Engineering Ltd has recently announced a £250,000 investment in new equipment, the first of its type since a management buyout in summer 2004.

Claro's managing director Martin Doxey said that the new equipment - a Matsuura Horizontal Machining Centre - would enable the company to offer horizontal milling for the first time.

Mr Doxey told NDI News: "Our aim is to build on Claro's enviable reputation for quality, and this investment is a first step in our plans to drive the company forward.

"Horizontal milling will enable us to offer an even better service to our customers, and will help us to increase production capacity and skills.



Claro's Mick Watson operating the new Matsuura Horizontal Machining Centre

"This new machine offers us significant advantages. For example, it can be set to run unmanned for several hours, which helps us to both keep costs down and to increase output. Initially this new equipment will be used to produce components for the communications and aerospace industries.

"We are based in Knaresborough, North Yorkshire, currently employ 46 people, and produce a range of precision parts and assemblies for a diverse customer base.

"Like many companies in this sector, we only thrive by being responsive to our customers' needs and unwavering in our pursuit of quality. The fact that we service many industry sectors, including defence, security, aerospace, fire protection and sub-sea demonstrates our flexible approach to winning business. Put simply, we aim always to surpass expectations".

## Burdon Ltd

Precision and production engineers Burdon Ltd are another example of NDI member companies that are pursuing a policy of investing for the future.

Barry Hindson, general manager at Burdon, explained how the company is planning for future success.

"We have seen particularly rapid growth over the last 3 years, growth that has more than trebled our business to a current turnover of £5 million.

"We've taken the long-term view that as a company we will succeed if we continue to invest in three areas: in our people, in our infrastructure, and in our equipment.

"We employ 50 people at our factory and we operate 24 hours a day. This places great demands on our workforce, and we need them to be at the top of their game.

"Everyone who works for Burdon receives thorough and ongoing training in modern manufacturing techniques including 5S, Kaizen and 7 Tools.

"We're keen to encourage young people to see engineering as an excellent career option, and we currently employ 4 apprentices at different stages of their training.

"Our confidence in our training has led us to work towards attaining Investors in People status, and we are well down the road to achieving that particular accolade.

"We set great store by quality in everything that we do; we already have full ISO9001: 2000 accreditation and we're in the process of attaining AS9100.

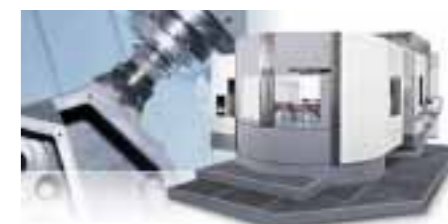
"Our investment in infrastructure and equipment has seen us spend over £1.5 million in 2004. Some of that investment



Part of Burdon's new 10,000 sq ft warehouse

was used to develop a new dedicated 10,000 sq ft warehouse facility, and we have also invested heavily in new machinery from the likes of Hitachi Seiki, Mazak and DMG.

"Our latest acquisition from DMG is the DMC 160FD machine tool - and it's the first machine of this configuration currently in the UK. It enables us to offer full simultaneous 5-axis precision machining up to 1.8 metres in size and up to 2.5 tonnes, with accuracy to 3 - 4 microns. One big advantage of this new equipment is that we are able to significantly reduce cycle times, something that is proving attractive to customers from the aerospace, medical and automotive sectors.



DMG DMC 160FD machine tool

"We have established an office in China from where we currently source over one million pounds worth of raw materials a year for machining by us here in the UK.

"All of this means that we are offering customers a combination of low-cost procurement, precision machining, UK quality control, inventory management and JIT/kanban delivery. Whichever way you look at it, that's a powerful proposition.

"The way forward for our company is to couple our investment to the development of open partnerships with other suppliers and customers, offering a full service to targeted industry sectors in dedicated production cells".

# Northern expertise aids current-day 'Dambusters'

In May 1943, the RAF's 617 Squadron – 'The Dambusters' – carried out THE precision bombing feat of World War II when they launched a daring night-time raid on the Moehne and Eder dams at the head of Germany's industrial heartland, the Ruhr valley, using a unique spinning underwater mine, the Barnes Wallis designed 'bouncing bomb'.

Sixty one years on, 'The Dambusters' are still engaged in precision attacks – aided by the skills and technical capabilities of some of the region's finest engineering companies.

Six northern defence companies – all of them subscribing members of Northern Defence Industries Ltd – have contributed to the development of what has been described as the world's most advanced cruise missile – Storm Shadow.

Storm Shadow was developed by Matra Bae Dynamics and it was given its operational debut by 617 Squadron in March 2003 during Operation TELIC in Iraq.

Just recently, 'The Dambusters' again demonstrated the awesome capabilities of Storm Shadow while conducting an operation in Iraq against a bombproof command bunker.

Two Tornado GR4 aircraft, flying from completely opposite directions towards their common target, locked on to it from a distance of about 150 miles. The two



Avro Lancaster Mark III specially adapted for 'Dambusters' raid, 1943

aircraft released one Storm Shadow missile each – and the devastating accuracy of the weapon was confirmed when both missiles entered the command bunker through exactly the same entry point.

Flexability Ltd of Hartlepool, Newburgh Engineering in Rotherham, Castings Technology International based in Sheffield, Hitek Electronic Materials from Scunthorpe, Metalweb plc in Cheshire and Ramsay Services in Gateshead have all been involved in the project, (one of the most demanding and most successful of its type in recent years), making contributions ranging from developing prototypes of the missile body & nose-cone for destructive testing, through to supplying components for the fusing system and producing the main body of the missile itself.

Harold Hickling, a director of Flexability told us: "Military contracts are a major

part of our business, accounting for about 40 per cent of sales.

"We provided flexible, unique fit circuit systems for the Storm Shadow project which form part of the fusing system.

"Including development time, the order has run for three years to date, and by the end of this year we will have supplied a total of 4,000 units".

Team Valley-based Ramsay Engineering has a workforce of 12, and they told NDI News that they secured a six-figure contract two years ago to supply gaskets and O-ring seals for Storm Shadow.

David Bowles, NDI's managing director said: "The involvement of our subscribing member companies in complex and demanding projects such as Storm Shadow demonstrates yet again the wealth of talent and capabilities that exists amongst our membership."



Tornado GR4 and Storm Shadow missile

## STORM SHADOW

Storm Shadow is a long-range air-launched cruise missile.

It is designed to hit well-defended static targets (bunkers, bridges, command centres) without the need to place the bomber in a situation where it would face enemy air defences. It can be launched from any location up to 155 miles (255km) from the actual target.

Before a mission, technicians on the ground programme the missile with the target coordinates and locations of air defences.

Once airborne, the pilot releases Storm Shadow while still far from the target.

The missile flies low and fast, hugging the terrain to cut under

radar and air defences.

Navigation is done in two ways. First, the missile's real location is constantly updated using global positioning system (GPS) data. Secondly, it utilises digital terrain profile matching to what it can see on the ground.

As it closes in on the target, Storm Shadow jettisons its nose cone to reveal a high-definition infra-red camera. This compares what is coming up on the ground with a stored image of the target.

Storm Shadow constantly adjusts its course and angle of attack so that when it hits, it hits with the utmost accuracy.

Once Storm Shadow hits, a small penetration charge takes it physically inside the target. Once through reinforced walls or similar, a larger delayed charge detonates.

# SyntheSys breaks into Europe

SyntheSys Systems is an NDI member company based in the historic port of Whitby in North Yorkshire.

The company has recently won two significant contracts, marking their entry into a new marketplace and the winning of new customers.

We asked Alistair Powell from SyntheSys to tell us about the company – and their recent successes:

"Traditionally, we have supplied consultancy services, primarily to the Ministry of Defence, for communications systems and Network Enabled Capability (NEC).

"NEC has become one of the key factors in today's defence environment. It is all about enabling the rapid & effective communication of command and control information & associated data around all units operating in the network. The emphasis is on achieving the timely delivery of this information to the units who need it the most.

## Sweden

"We have been awarded a contract to support the Swedish Ministry of Defence (FMV) in their application of NEC and Tactical Data Links in country. Sweden is in the process of implementing a network-based capability, for operation both amongst their own forces and also with coalition and NATO countries.

"This implementation involves updates to both the operational units – aircraft, ships and ground-based systems – as well as an infrastructure to support and maintain the system throughout its life cycle.

"We were asked, firstly, to provide advice on how this can be best achieved. We were also tasked to undertake a review of their activities so far, and then to provide advice on the future direction.



Network Enabled Capability in action

"What the Swedish authorities are looking for is impartial advice; as a totally independent company we are well-suited to play the role of 'customer friend'.

"We are well-placed to provide 'customer friend' support of this type – and we do this already in many different areas of the UK defence market. Our team is an almost unique blend of ex-operational staff – for example ex-RAF Tornado crew and Royal Navy officers – coupled with

experienced technical systems engineers. We are based in Whitby, but we have staff located throughout the UK and the USA, and they very often work on-site with our customers, integrating easily into their teams.

## NATO

"Our second recent contract win concerns NATO and their Data Link Configuration Management System.

"NATO maintains control of the current status of its communications systems through a forum of all the participating countries. The status of all the proposed changes is maintained on a database. We have been contracted by NATO to update this system, to enable on-line voting by all the countries through a secure web enabled interface, and to provide a range of other features. We will provide on-going support for this system once it is delivered later this year.

"This database is pivotal to enabling the NATO group to maintain its control of the interoperability status of its member countries, and hence the overall effectiveness of each country's aircraft, ships and land-based systems when they are in joint operations.

"SyntheSys won this work following intense competition from a number of companies from around Europe. This new business is a real confidence booster and it demonstrates our ability to win work and develop strategic relationships on an international basis".

# Stadium gains a North 'first'

It's always nice to score a 'first' in any field – and particularly gratifying when the accolade comes from the Ministry of Defence.

NDI member company Stadium Packing Services (SPS) has become the first company in the North of England and Scotland to win the MOD DR14 certificate, allowing them to design and produce transport containers for the military.

Muriel De Vere, divisional chief executive of SPS, which is part of the British

Engines group told us: "We are the only company in the North of England and Scotland to have reached the DR14 standard – and there are only a very small number of companies anywhere in the country who hold this accreditation. "To achieve the DR14 standard involves a rigorous qualification process which begins with an intensive five-day course. Our unit general manager Brian Smith was the first of our team to secure accreditation, and production manager John Sarginson is also taking the course,

which involves more than a year of training.

"The DR14 approval means we can design secure packing cases and crates that are suitable to carry delicate or potentially dangerous military equipment.

"Defence is an area that is proving to be fertile ground for our company; we currently have 12 contracts to supply specialised packing solutions to companies in the defence sector, and this is something we are looking to develop further."

Stadium Packing Services currently employs 22 people at its Gateshead site, and a further 20 in Glasgow.

# NDI "world beaters" celebrate as A380 unveiled

When the world's biggest passenger aircraft – the 555-seater Airbus A380 – was triumphantly unveiled in Toulouse on January 18th, northern engineering excellence was put very firmly in the spotlight by Prime Minister Tony Blair and industry minister Jacqui Smith, who described northern aerospace and engineering companies as 'world beaters'. The 'Superjumbo' was revealed before an invited audience of 5,000 VIPs, including Mr Blair, French President Jacques Chirac and German Chancellor Gerhard Schroeder.

Mr Blair praised the British companies involved in the plane's creation, and said the wings produced by UK workers were the most complex and technologically advanced part of the aircraft. He said: "This is the most exciting new aircraft in the world. I feel tremendously proud of the British contribution.....this is British industry working at its best. We should be proud of what has been achieved."

Industry minister Jacqui Smith homed-in on the specific contributions made to the project by companies from the North of England, saying: "The workers in these firms that have put this together are rightly proud of their achievement. They are clear evidence that UK hi-tech



Airbus A380

manufacturing is still a world-beater. The Airbus A380 is a visionary project and I'm proud of the role that the region has played in its construction".

Three NDI member companies have won contracts on the project: Aerospace Systems & Technologies (AS&T) in Consett; Harkers Engineering from Stockton, and Scarborough-based Unison.

We spoke with our members and asked them to describe their role – and what it meant for their companies....

AS&T created 40 jobs after winning a contract in 2002 to design and supply trailing edge wing spars and stringers for the A380. The deal will be worth about £5.4 million annually to the company and represents about 15% of AS&T's annual turnover. Owen McFarlane, AS&T's chief executive officer told us; "These components are absolutely key to the Airbus A380, and involved both design work and precision manufacturing.

"The contract looks likely to provide five years of work for our staff of 249. I'm pleased to say that every Airbus has a bit of our business in it". AS&T has previously supplied aerospace components to BAE Systems and Raytheon.

Peter Harker, managing director of Harkers Engineering said: "We are making the half-tonne housing for the aircraft's leading landing gear. It is an extremely complex piece to manufacture because it requires very fine precision. We secured the contract in 2002, and it is worth around £2.34 million annually to the group. We expect to make around 125 of these components in total during the life of the contract. (Harkers Engineering



Airbus A380 is unveiled in Toulouse (picture courtesy of Associated Press)

started life in 1878 as a maker of steam engines; it now employs 135 people in Stockton, with Peter Harker the fifth generation of his family to lead the company).

Further south, in Scarborough, Unison are also celebrating the unveiling of the A380. Hidden inside each A380's wings are miles and miles of hydraulic tubes, all bent to precise shape and tolerances by Unison's 'Breeze' range of bending machines.

Unison's Terry Pickering said: "We have established a good relationship with Airbus and our latest deal – worth about £225,000 – brings us a lot of credibility within the industry. The tubes inside the A380's wings have got to be extremely strong and very light. Our bending machines have helped Airbus to speed up production and cut waste."

Unison has an annual turnover of around £1.5 million – and hopes to secure another contract with Airbus in the near future.

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