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## BUSINESS

# Skipper trying to navigate BAE through stormy seas

### Trident submarines, Tempest jets: Charles Woodburn has a battle on his hands. Then there's Saudi Arabia

#### INTERVIEW JOHN COLLINGRIDGE

There was a time when BAE Systems could do no right. The defence giant's reputation for delivering big projects late and over-budget earned it some unwelcome monikers and jibes – such as Big and Expensive Systems and Any-one But BAE.

These were not unwarranted. Serial misdemeanours included delays to its Astute hunter-killer submarines and the scrapping of its Nimrod spy-planes before they had ever seen service. Pictures of those craft being dismembered at a Manchester airfield in 2011 greatly discomfited ministers.

Charles Woodburn was aware of all this when he arrived at the defence giant in 2016, initially as chief operating officer.

"There were some parts of the business that had consistently delivered outstanding operational performance, and some parts that had historically had challenges," says the chief executive of BAE, with some understatement. "We are getting better at delivering on things."

His plan was to get the disparate and "siloes" areas sharing expertise. Woodburn, 50, parachuted a manager in from BAE's fighter jet business to run the submarines side – and "within literally six months of him arriving, we saw an improvement in productivity".

Few companies carry more national significance than the maker of Trident warhead-armed submarines, warships and fighter jets. Formed from the 1999 merger of British Aerospace and Marconi Electronic Systems, it builds the submarines at Barrow-in-Furness in Cumbria.

Last week's integrated defence review underlined that crucial role by adding weight to Britain's policy of Continuous At Sea Deterrent (CAS-D). Since 1969, Britain has always had at least one nuclear warhead-armed submarine lurking undetected beneath the sea at all times. Boris Johnson announced plans to increase the number of warheads, potentially by 40 per cent to 260.

BAE, nuclear reactor-maker Rolls-Royce and Babcock, the maintenance company, are arguably the weakest links in ensuring that CAS-D can be maintained. The first of four new Trident-armed Dreadnought submarines was due to enter service in 2024, but will not now arrive until "the early 2030s", according to the government.

Last year, the National Audit Office said construction of new facilities at Barrow was almost two years behind schedule. That means the existing Vanguard fleet, which has already served for 13 years longer than intended, will be patched-up museum pieces by the time the first Dreadnought arrives.

Replacement of the nuclear submarines is a huge endeavour: the budget is £31 billion, a contingency fund taking it to £40 billion. BAE employs 10,000 staff on the submarine programme, and generates £1 billion of annual turnover from that work. Only one other government project, HS2, is more expensive.

Woodburn chooses his words carefully when asked whether BAE will build the new submarines on budget and to the revised deadline. "We're making good progress on Dreadnought. Every iteration that we have of submarines, we get better at doing it," he says.

That doesn't quite answer the question. Is he confident that BAE will hit its targets? "We're making very good progress on Dreadnought," he dead-bats.



CHRISTOPHER ISON FOR THE SUNDAY TIMES

Woodburn cites the two Queen Elizabeth-class aircraft carriers – the biggest vessels ever built for the Royal Navy, at a cost of £6.8 billion – as evidence that BAE has changed its ways. "At the end of the day, two 65,000-tonne carriers, at the price that was delivered, on the international stage is still seen as a real achievement." BAE's Type 26 frigates – Britain is buying eight – are "the world's best anti-submarine warfare frigates", he says. Australia and Canada appear to agree, having placed orders for the vessel.

Until relatively recently, Woodburn preferred to operate behind the scenes. Tall, with a stern demeanour, he appeared more comfortable out of the limelight, leaving the glad-handing to his chairman, Sir Roger Carr. Now, more than three years into his job as chief executive, he is speaking via video call from his office in central London – and the choppy nature of our call is a reminder of the challenges that BAE, like most busi-

nesses, has faced during the pandemic. About 20,000 of its 34,000 UK staff are working from home, but they have been unable to benefit from a decade of progress on the internet; collaboration tools such as Google Drive and Microsoft OneDrive, which allow files to be shared remotely, are forbidden on BAE's network because of the risk of hacking.

Still, that looks wise: the US government is reeling from last year's cyberattack, when flaws in Microsoft Outlook's web app granted a hostile government – thought to be Russia – months of undetected access to classified data and emails. "It's fair to say that a company like ours is always under attack to a certain extent. We've coped well with it but we remain paranoid around this, because you have to be. We've done a very good job of keeping our operations safe."

Nor, Woodburn says, has a year of lockdown put much of a dent in BAE's operations. After an initial slowdown, it

worked out how it could get staff back into factories safely. There was a degree of necessity: BAE cannot afford to lose any more time on its programmes. "There are some activities we do that simply can't stop," he says. "And then there are others where it's protecting 'critical path', making sure that we minimise the overall schedule impact."

Woodburn was a late convert to the defence industry. After doing a PhD in nanotechnology at Cambridge, working on a form of microscopy that studied surfaces in atomic resolution, he wanted to apply some of those skills in a "practical, real-world environment". He joined the Houston-based oil services giant Schlumberger, travelling the world from Thailand to Australia. By 34, he was running a division with 12,000 staff and \$5 billion of sales. Four years later, he was one of the internal candidates to be chief executive – but when he was unsuccessful, he quit to run a business.

**BAE boss Charles Woodburn says it is 'getting better at delivering' after past problems with Astute and Nimrod**

“It's fair to say we'd all like an end to the conflict in Yemen. That includes Saudi. But it's a difficult political situation

## THE LIFE OF CHARLES WOODBURN

### VITAL STATISTICS

**Born:** March 11, 1971  
**Status:** married, with two children  
**School:** Dr Challoner's Grammar, Amersham  
**University:** St John's College, Cambridge (undergraduate then PhD); MBA at Erasmus University Rotterdam  
**First job:** field engineer for the oil services giant

Schlumberger in Thailand  
**Pay:** £3.9 million, inc bonuses  
**Home:** Surrey  
**Car:** grey Porsche 911

**Favourite film:** Interstellar  
**Book:** Surely You're Joking Mr Feynman!, by Richard Feynman  
**Music:** "The music I grew up with" – Peter Gabriel, REM, Sting and The The  
**Gadget:** all gadgets – audio,

video, tools and computers  
**Charity:** Cancer Research UK  
**Last holiday:** Colorado

### WORKING DAY

The chief executive of BAE Systems gets up at about 6.30am and travels to the company's offices in Farnborough or central London, or to



BAE's boss went to St John's College, listens to Sting and is a fan of the film Interstellar

its sites across Britain. Charles Woodburn meets staff, managers, customers and investors. He tries to exercise most days, usually in the early evening or first thing.

### DOWNTIME

Woodburn enjoys watching films, cycling on a road bike – or using virtual apps such as Zwift and Strava – skiing and spending time with his family. Conversations around the dinner table often gravitate towards science: his wife, a teacher, has a PhD in biochemistry and his daughter is working on a PhD in life sciences.

Woodburn alighted on Expro, a private equity-owned oil services business laden with debt, and spent several years cleaning it up. "You're suddenly dealing with a bunch of hedge funds and debt holders, mezzanine debt ... it's a skill set you don't naturally develop in a big company that you do develop in the private equity world – and it opened my eyes to a completely different side of business."

Woodburn persuaded Sir George Buckley, chairman of FTSE 100 conglomerate Smiths, to join him as chairman of Expro. "Charles is a very adaptable guy – he's a chameleon," says Buckley. "He will seek to find a balance point between parties and is very well liked by customers. He has an innate fairness and decency – he's calm, consistent and authentic."

A big role for Woodburn is working out what BAE will be in the future. The failed merger attempt with Airbus in 2012 is a distant memory, with the politics of Brexit making a repeat unlikely any time soon.

What about leading the consolidation of the UK's defence industry? Rumours of a deal to combine Rolls-Royce's reactor business with BAE have resurfaced recently, and Babcock increasingly looks in need of a saviour. "I'd suggest it's less around industrial consolidation and more how UK industry can work together," Woodburn counters.

Tempest, the stealth successor to the Typhoon, is a big potential prize for BAE. The futuristic fighter jet is being developed in collaboration with Italy and Sweden, with the aim of entering service in the 2030s. It will be needed to sustain the UK's fighter jet industry, based in Lancashire, but huge obstacles lie ahead – not least the estimated £25 billion development bill. "Tempest is the future military capability for the UK and some of its allies. Maintaining and developing that capability is incredibly important," Woodburn says, adding that the government is trying to attract new partners.

"Over the next couple of years, we may see some evolution on that front. But that's very much a political decision."

One political decision that BAE and Woodburn have not been able to escape involves the UK's close relationship with Saudi Arabia – and the kingdom's crumbling reputation on human rights. Since the 1985 Al-Yamamah guns-for-oil deal, BAE has been entwined with the kingdom – and controversies such as the 2010 bribery scandal. Now the war in Yemen and the murder of the journalist Jamal Khashoggi have once again cast BAE's arms sales to Saudi in an ugly light.

BAE has almost 7,000 staff in Saudi, and its Typhoon orders have kept production of the jets alive in Lancashire. But opposition to the regime from new US president Joe Biden and Germany's Angela Merkel has left Britain and BAE looking isolated. Woodburn's face hardens when the topic comes up; any decision on Saudi is a "government-to-government" one, he insists. "The kingdom of Saudi Arabia has been a strong partner of the UK in the war against terror, and continues to be a strong ally in the region.

"Our presence in the kingdom has been significant for a long time. It's fair to say that we'd all like an end to the conflict in Yemen – and that includes the Saudis, too. But it's obviously a difficult political situation on which all parties need to find agreement."

Woodburn insists that in 20 years of travelling to Saudi, he has seen a "profound" change in "liberalisation, women in the workplace". "It's unfortunate that the conflict in Yemen, as bad as it is, overshadows some of the real, positive momentum that we see in the reform agenda on the ground in the kingdom."