

**NATS**

# Our Story





## Foreword

Our history tells us we are capable of outstanding achievements. Our challenge today is to build on past successes and shape the future of an industry that is changing more dramatically than at any other time.

This short book provides some headlines about our past, present and future. It is designed to create conversations about our business – who we are, what we do and where we are going. It seeks to capture a sense of the pride and professionalism of the people who have built this successful company. It introduces our new imagery, designed to bring alive our ambitions in what we say and do. It points to our future as we strive to lead the way technically, operationally, commercially and politically. And it makes a clear statement about how we intend to stand out from the rest of our industry.

Our future success depends on our ability to influence thinking and challenge the status quo. To provide first class customer focus. All underpinned by excellent safety and service.

I am proud to be part of the NATS-wide team that has the opportunity to write the next chapter in our story – perhaps the most exciting yet!



**Paul Barron**  
Chief Executive, 2006



Flight light, a Handley Page airframe at Croydon in the 1930s



Croydon control tower, the UK's first purpose built international airport, early 1930s

## Early Days

NATS' heritage goes back to the pioneering days of commercial aviation. But air traffic control (ATC) as it is today had to await the civil deployment of radar after the Second World War and the advent of reliable, capable airliners.

In the early days, merely staying in the air was an achievement. Finding your way became the next big challenge and the small number of flying machines in use meant that bumping into one another was hardly a major concern.

It wasn't until 25 August 1919 that the first international commercial flight left Hounslow aerodrome for Paris Le Bourget. Carrying one passenger and a brace of grouse, the converted bomber arrived two hours 20 minutes later.

Croydon replaced Hounslow as London's airport in 1920. In those days ATC comprised flags to indicate the circuit direction to be followed by arriving aircraft: blue for right-hand, red for left. Lights were used at night. The routes to be followed by aircraft flying between London and Paris, and later other European cities, had also been agreed. To help pilots find their way to Croydon, stations along the way painted their names in large white letters on their roofs.



### The first airways

The Americans were the first to establish a system of airways defined by radio beacons. Senior air traffic controller, Arnold Field, was sent to study the system at Chicago in 1949. The knowledge he brought back helped to establish Europe's first airway, Green One, which ran from Reading to Bristol. It was followed by others including Amber One from Daventry to Paris.

More than 40 years later, Arnold Field described how controllers managed before radar enabled them to see the aircraft they were controlling:

“Controllers needed to keep a mental picture of the position of ‘their’ flights. Aircraft were represented by pieces of paper – the flight progress strips – placed in distance and time order from the navigation waypoints they were using. From a combination of flight strips, phone calls, radio-telephony messages and ATC instructions, controllers had to visualise the position of aircraft that were sometimes hundreds of miles apart.”

Communications centre, Croydon, 1945, forerunner of NATS' current Civil Aviation Communications Centre (CACC) at Heathrow

## Towards radar

The Chicago Convention – setting out the rights of countries in relation to air travel, and the rules on airspace, aircraft registration and safety – was signed by the UK and delegates from 51 other countries in 1944. Three years later the International Civil Aviation Organisation was formed to regulate air transport on a world-wide basis. It remains today to ensure the development of international civil aviation in a ‘safe and orderly manner.’

The first recorded traffic figures from 1949 show the UK was handling some 18,000 flights annually. With air traffic rising, development was needed in ATC technology to enhance safety and efficiency. The state-owned British Overseas Airways Corporation called for ‘a properly equipped corridor system of control’ over the UK. Easier said than done! Developed during World War Two, radar was originally a military tool. Ex-military radars were used for civil air traffic control, but the 1950s Southern Air Traffic Control Centre (SATCC) at Heathrow was the first major civil radar installation. Radar became the main tool for keeping aircraft safely separated.

By the 1950s most British civil airports were using the US-developed ground controlled approach (GCA) equipment. At Heathrow the GCA was installed in one lorry and the generator in another. Both were stationed at the end of the live runway: when the wind direction changed so did runway utilisation and the GCA fleet moved accordingly.



Radar controllers at the Southern Air Traffic Control Centre, 1963. Situated on the north side of Heathrow, this centre was the predecessor to London Area & Terminal Control Centre

Air traffic engineer, Peter Hall, later recalled:

“Because the aerials on the trucks were anchored to the ground with guy ropes to stabilise them, we spent a lot of time pulling up the pegs, driving off to the new position and knocking them in again.”



### **NATS takes off**

There was still no unified system for controlling Britain's rapidly growing air traffic in the early 1960s – now approaching 500,000 flights a year. Growing concern about air-misses involving civil and military aircraft led to Air Chief Marshal Sir Hubert Patch being appointed to investigate. He led a team which included Bill Woodruff, who later retired as Controller NATS (the equivalent to today's Chief Executive) and the Patch Report was published in 1961. Following its recommendations, National Air Traffic Control Services was formed in December 1962 as a joint and integrated organisation with staff from the Board of Trade and Ministry of Defence (MOD). The word control was soon dropped.

### **National Air Traffic Services (NATS) was born...**

Due to the heavy demands on UK airspace, it was felt to be wasteful and restrictive to segregate commercial and military activity unnecessarily. The joint and integrated air traffic policy resulted in a system which ensured that airspace was optimised safely and effectively for all users.

In 1972, NATS was separated from direct government control and made accountable jointly to the Chief of the Air Staff and the chairman of the newly-formed Civil Aviation Authority (CAA). NATS was now responsible for a system with four area control centres – London Air Traffic Control Centre, Scottish Domestic, Oceanic and Preston – known as the Northern Air Traffic Control Centre (NATCC) – and a combined total of 150 radar displays presenting basic information for the tactical control of air traffic. Air transport movements were rising at an annual rate of 3.5 per cent.



West Drayton Operations Room, 1970s

### London Air Traffic Control Centre opens

Meanwhile, plans were being made for nationwide radar surveillance based on a military early warning system called Linesman. The civilian element was called Mediator. It was installed from 1971 at the London Air Traffic Control Centre (LATCC), which had opened at RAF West Drayton in 1966. Continual modification delayed Mediator's service entry and the programme wasn't fully complete until 1975.

LATCC assumed control of the London Flight Information Region – the en-route and terminal airspace over England and Wales to the Scottish border, while Manchester handled the lower-levels over the north of England. West Drayton's horizontal radar displays remained in use until January 2002 when the area control room there handed over to the new Swanwick Centre. Terminal and en-route operations will be under one roof again – this time at Swanwick – from 2007.

### New technology

The pace of technological development was quickening too. Secondary surveillance radar (SSR) not only gave information about the position of aircraft but also about their identity and height. Instrument landing system (ILS) equipment at airports offered radio beam guidance to the touch-down point. In 1972, a BEA Trident equipped with Autoland equipment made the first-ever 'blind' landing at Heathrow. In 1972, the Apollo computer system was introduced at the Oceanic Control Centre at Prestwick to calculate precise flight times for aircraft flying the north Atlantic where radar coverage is limited by the earth's curvature. Apollo printed flight progress slips and was later linked on-line to the system at Gander in Newfoundland.

### The challenge of growth

Managing what was fast becoming some of the world's busiest and most complex airspace necessitated further developments:

In 1975 the Preston Centre closed and our teams joined with Manchester Airport ATC to form Manchester Sub-Centre. Over time many staff became qualified to provide aerodrome, approach and area control services and this unique combination of validations continued until the mid-1990s. The unit was renamed Manchester Area Control Centre and Airport in July 1993. The days of working tower, approach and area were on the way out as both the airport and the area centre became busier.

The Scottish operation – both domestic and oceanic – began at Redbrae House, a converted country house on the edge of Prestwick airfield. 124,386 oceanic flights were handled from there during 1972, reaching a peak of 55 at any one time. Growing demand meant a move to larger premises and the operation transferred to the converted Coal Board offices at Atlantic House in 1975. At the same time, the associated radar operation at Gales, a former wartime radar station, also moved to Atlantic House.

In 1988 the CAA made the first move towards separation of service provision from regulation when its Safety Regulation Group became NATS' safety regulator.

In 1990 the area and terminal control functions at LATCC separated and it was renamed the London Area and Terminal Control Centre. Soon after, in an innovative project that enhanced co-ordination while improving safety and efficiency, the Central Control Function (CCF) brought together airport approach controllers. First to move were those from Heathrow and Gatwick, followed in 1995 by those from Stansted. Luton followed in 2001 and London City in 2003.

*"The thing that characterises TC is the complexity of the airspace and what the teams manage to achieve with it. It's hugely demanding, massively dynamic, and fantastically rewarding."*

**Alison Ford, Air Traffic Controller and Group Supervisor at Terminal Control**



Manchester Tower, within which is Manchester Area Control Centre

*"From the late-seventies into the nineties there were many of us at Manchester who had triple validations – working tower, approach and area control – virtually unheard of at any other civil ATC units."*

**Peter Heath, former Air Traffic Controller at Manchester**



Recruiting and then training people with the necessary skills levels and expertise has always been essential for NATS. Originally established in 1949, the School of Air Traffic Control at Hurn became the College in 1962. Over the years, thousands of students have successfully graduated to support the growth of NATS business, including international students from over 150 countries.

In addition to training, Hurn also houses one of Europe's largest air traffic management test and development facilities – key to enabling us to manage increasing traffic numbers safely and efficiently. The main operations room at Hurn is bigger than some countries' ATC Centres. Major innovations such as the Clacton airspace reorganisation (1998), North Sea (2003) and most recently the West End airspace reorganisation (2006) – the biggest ever in the UK – as well as the very latest technological development of Mode S and iFACTS have all taken shape at Hurn.

“In 1969, as part of our aerodrome training at Hurn, we flew around Bournemouth on CAAFU Doves (Civil Aviation Authority Flying Unit planes) helping trainee radar controllers to master precision-approach radar (PAR)”

Paul Loudon, former ATCO Cadet, now General Manager NERL Development



International students at College of Air Traffic Control, Hurn, 1970s

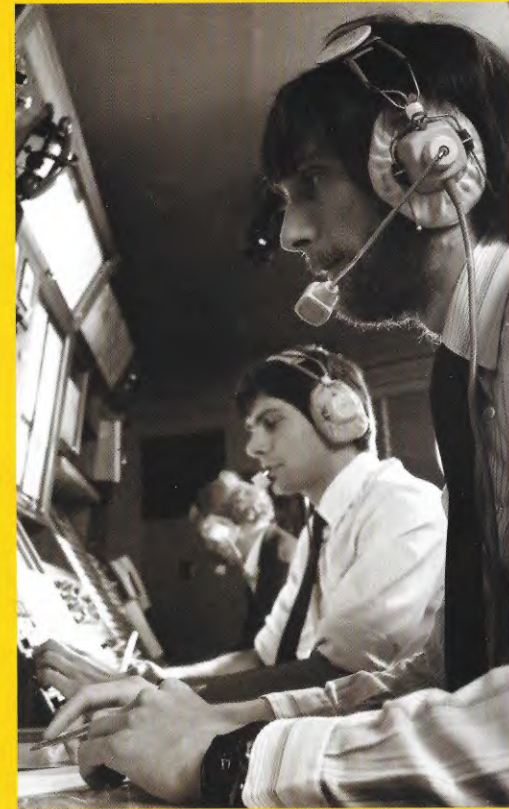


Aberdeen Tower, early 1980s

“The demand for NATS’ expertise was growing and we were constantly seeking to establish ourselves as the industry’s partner of choice across the UK.”

Brandon Chapman, Director, NSL Business Centre

Birmingham tower, 1980s



### Airports expand

Since its formation NATS has not only been responsible for en-route air traffic control but also for air traffic services at some major UK airports previously under government or local authority control. By the early 1990s these included Heathrow, the world’s busiest international airport and Gatwick, the busiest single runway airport, together with Stansted and major regional gateways like Manchester, Birmingham, Glasgow, Edinburgh, Cardiff and Belfast International. The list also included Aberdeen, then the world’s busiest heliport, supporting the North Sea oil and gas industry.

In 1995, easyJet was launched and Ryanair celebrated its tenth birthday with the news that it was now carrying 2.25 million passengers a year. Europe’s ‘no-frills’ air travel revolution had begun. By 2003, both airlines would be carrying more than 21 million passengers a year. In the mid-1990s the European aviation market was liberalised when route licensing restrictions were removed, fuelling the drive for regional airports, and regional and ‘no-frills’ carriers, to expand their operations.

Concorde takes off from Cardiff during its farewell tour, October 2003



### Towards the PPP

By the early 1990s the House of Commons Transport Select Committee and the Monopolies and Mergers Commission had both proposed that the CAA's service provision activities, carried out by NATS, should be separated completely from its regulatory duties.

The Conservative government eventually decided not to press ahead with privatising NATS and instead agreed to establish it as a wholly owned subsidiary of the CAA. The new company, National Air Traffic Services Ltd, came into being on 1 April 1996. The Directorate of Airspace Policy transferred to joint CAA/ MOD control, the MOD ceased to have a role in the management of NATS, and a new Operating Agreement was put in place to govern the relationship between NATS and the MOD.

### But what about funding?

Constraints on public expenditure were threatening NATS' investment needs to modernise the infrastructure and to increase capacity to meet projected demand. In 1993 the Chancellor of the Exchequer announced that two of NATS' biggest projects – the New Scottish Centre and the Oceanic Flight Data Processing System – would be developed under the new Private Finance Initiative (PFI).

### But was the PFI the right vehicle for upgrading the air traffic control system? And were there any realistic alternatives?

Soon after Labour's election in 1997, the new government announced that NATS would be established as a public-private partnership (PPP), fully separated from the CAA and able to fund the investment programme without recourse to the PFI.

It was a controversial proposal and there was a strong campaign against it but, on 27 July 2001, the new NATS became Europe's first major air navigation services provider operating in the private sector. The Airline Group, a consortium of leading UK airlines including British Airways, British Midland, easyJet, Virgin, Airtours, Britannia and Monarch acquired 46 per cent of NATS, financed mainly by loans from a consortium of leading banks. Five per cent was reserved for staff, with the remaining 49 per cent held by the government.

The PPP was a watershed in NATS' development – the dawn of a new era.

And then, with the ink scarcely dry on the PPP...

## 11 September 2001

The air transport industry was plunged into turmoil after terrorists hi-jacked airliners and flew them into New York's World Trade Centre and the Pentagon in Washington with tragic loss of life.

These seismic events challenged NATS in many ways. Initially there was the immediate situation to attend to. The US authorities closed the nation's airspace which meant that oceanic controllers at Prestwick had to contact nearly 200 aircraft and revise their flight plans. Some diverted to alternative destinations but many turned back. A ban on flights over London meant changing Heathrow arrivals procedures. London City airport was closed for several days.

**“Controllers were stretched to the limit passing traffic information, finding conflict-free paths, descending returning flights and handling massive amounts of co-ordination.”**

**Keith Richardson, Manager ATC Ocean**

The commitment and team spirit displayed by people right across the company at this time of crisis won widespread acclaim.

The longer-term effects of 9/11 on the airline industry were to prove even more challenging. Passenger numbers declined. Airlines cut route networks, shed staff and parked hundreds of surplus aircraft in the Arizona desert. Some carriers disappeared altogether.

9/11 challenged all air navigation service providers but it probably hit NATS harder than most. With over 30 per cent of our total revenue derived from handling trans-Atlantic flights, we were one of the first to feel the impact. In the first six months following 9/11, transatlantic traffic dropped by 15 per cent, and NATS en-route revenues fell by nine per cent. The business plan was re-worked. Efficiencies were sought. Overheads were cut. Work on the new Prestwick Centre was halted.

It was a difficult time...



Checking airfield visibility equipment at Edinburgh Airport, 2005

“By any measure 2004-5 has been our best on record both operationally and financially. Our challenge was to respond to a growth in traffic of some five per cent while continuing to uphold our commitment to safety, and our promise to drive down delays. To have achieved all these things and for the first time since PPP declared a dividend to our shareholders is a credit to everyone who has worked tirelessly to achieve this result.”

Dr Chris Gibson-Smith, former NATS Chairman

### Securing financial stability

It wasn't until March 2003 that financial problems were eased, following agreement with our stakeholders to the 'Composite Solution'. This involved a complex regulatory and financial restructuring comprising a commitment by NATS to achieve £200 million of cost savings; an injection of £130 million of new funds from government and a new shareholder, airports operator BAA, used to repay bank debt; a relaxation of price controls until 31 December 2005; and a restructuring of bank facilities.

**Finance director, Nigel Fotherby hailed the deal as:**

great news for NATS, providing us with some much-needed financial stability.”

In August 2003 we made our debut in the capital markets, successfully issuing a £600 million bond to replace more expensive bank debt raised at the time of the PPP. This was followed by the syndication of our remaining bank facilities, again successfully achieved, indicating that the financial markets had confidence in the company.

In June 2004, we announced our first profit since the PPP. A year later, Moody's upgraded their credit opinion of our regulated business one notch from Baa2 to Baa1, Standard & Poor's already rating the company A-. In 2005, there was widespread media coverage of our first significant profit since PPP of £68.8 million for the financial year 2004-2005 which enabled a first-ever dividend of £5 million to be paid to shareholders, including employees.

Operations Room, Swanwick, opened 27 January 2002



### A technological triumph

The huge effort that went into commissioning the new London Area Control Centre at Swanwick, Hampshire culminated at 00:53 hours on 27 January 2002 when Airtours International flight AIH550 – an Airbus A321 en-route from Las Palmas to Birmingham – became the first aircraft to receive an ATC service from the new centre. Hurn sector tactical controller, Sarah Harris, planner controller, Steve Martin and assistant, Mark Marshall, formed the 'D' watch team. Television and radio bulletins featured Sarah telling the aircraft's crew: "You're the first aeroplane!"

"We were aware that we were likely to be the first sector to handle traffic. It was quite exciting and the pilot entered into the spirit of it too. I was in the right seat at the right time."

**Sarah Harris, Air traffic controller**

"Swanwick was in many ways a painful experience for NATS. Hugely difficult to deliver requiring tremendous efforts by people right across the company. It has proved remarkably reliable and has gone well beyond what we had initially envisaged."

**Colin Chisholm,  
former Chief Executive Officer**

Swanwick had originally been planned for operation in 1996 and its protracted development was due to many factors, not least the repeated takeovers of the company doing the work, and the failure and subsequent cancellation of the much larger US Federal Aviation Administration development plan with which it was linked. Many project management lessons have since been learned. But despite the delays and early problems Swanwick has been an unprecedented success. With more than 200 workstations and designed for a long operational life, it was probably the biggest and most complex ATC development project ever undertaken. All sectors were running at 100 per cent capacity in time for the Easter traffic surge and Swanwick has since handled over five million flights without a single serious safety incident. In November and December 2004, Swanwick teams achieved 25 consecutive days of zero delay.

"The new centre is a technological triumph."

**Lord Clinton-Davis, president of the  
British Airline Pilots' Association,  
during a debate in the House of Lords**

## Prestwick Centre moves forward

In October 2003, building work for the Prestwick Centre resumed after a two-year suspension following the 9/11 terrorist attacks and the consequent air traffic downturn. The new centre, a crucial pillar of NATS' two-centre strategy for the future, is expected to be operational by 2010. It will become Europe's sixth largest centre managing 650,000 square miles of airspace and incorporating our current Manchester Area Control Centre teams with the present Scottish and Oceanic operation.

Another key element of the two-centre strategy is the move of civil and military staff from West Drayton to new custom-built operations rooms at Swanwick during 2007 and also to the expanding Corporate & Technical Centre at Whiteley, just five miles from Swanwick.

"We're heavily involved in the CASPIAN Programme – we want to make sure we're building in the freedom and flexibility so that our teams can deliver what our customers want."

Doug MacLean,  
Relief Watch Supervisor, ScOACC



easyJet taking off from Luton, 2005



## Building for the future

### Further key building blocks have been put into place:

In 2002, a £1 billion, 10-year investment plan was announced to support NATS' aims to be world leader in air traffic management by setting 'best in class' standards for safety, service and value. At the same time, NATS made a commitment to handle a 50 per cent increase in flights, from two to three million by 2010/11; reduce NATS' attributable delays to less than one minute per flight; cater for an increase in controllers and next generation of automated support tools and to take advantage of commercially available, off-the-shelf systems developed jointly with other providers. The plan got under way in 2003 with a £127 million programme to replace secondary surveillance radar equipment at 20 UK sites.

Technological developments were also in progress. The world's most advanced airport surveillance system, combining data from a Mode S multilateration sensor with data from conventional ground movement radar, was installed at Heathrow in 2002.

Also in 2002, we developed our relationship with NAV CANADA – the Canadian air navigation service provider – by starting to work jointly to develop the Shanwick Automated Air Traffic System (SAATS). SAATS replaces our Oceanic Flight Data Processing System (FDPS) in 2006, further improving safety, service and efficiency.

Our partnership with NAV CANADA includes ground-breaking work on electronic flight progress strips – creating the 'paperless tower'. In 2004, Stansted was the first UK airport to go live, Gatwick came next with Luton and Heathrow due to follow in 2006.

In December 2003, the government published a White Paper on the future of UK aviation. This set out a blueprint for the development of the nation's airports up to 2030 with new runways projected for Stansted, Heathrow, Birmingham and Edinburgh. As part of our response, we pointed out airspace infrastructure developments would be needed to complement those on the ground – any decision on future airport expansion must be based on a 'holistic' assessment of the demands on both.

In 2004 the award-winning Corporate & Technical Centre (CTC) at Whiteley, five miles from Swanwick, was declared open. When engineers depart Spectrum House for CTC from May 2006, NATS will become one of Hampshire's five biggest employers. Headquarters staff now accommodated at the CTC had earlier left One Kemble Street, leaving Brettenham House as our sole London office. Our team at the Scottish Accounting Unit in Edinburgh continued to deliver a major part of our accounting function and to manage our insurance arrangements.



## Leading the way

Richard Everitt, NATS' chief executive since the PPP and the man who led the company through its regulatory and financial restructuring, handed over to Paul Barron in June 2004. In his first 30 days, the new CEO met 2,000 of the company's staff in a tour of 15 sites. And before the year was out the Executive team had painted a picture of the future.

"This is a memorable day for NATS – it's getting us to a stage where some of us have been dreaming about this sort of NATS for many, many years."

**Bill Semple, Non-Executive Director and former Chief Executive – speaking at the launch of 21 destinations**

"We've imagined April 2007 and committed to achieving 21 key targets, or destinations as we are calling them. By achieving these we believe we will then be shaping the future of our industry by setting standards in safety, service and value for our customers."

**Paul Barron, Chief Executive – speaking at the launch of 21 destinations, November 2004**



Terminal Control Operations Room, West Drayton, 2004



21 destinations imagery

Our new Corporate & Technical Centre, Whiteley, opened 2004



The pace of change quickened during 2004 and 2005 with a number of significant developments that will play a large part in shaping our future:

In November 2004, NATS and the Irish Aviation Authority (IAA) jointly commissioned a study into the issues associated with establishing a functional airspace block (FAB) covering the two nations. FABs are seen as a key step in the development of the Single European Sky, a European Union initiative aimed at creating a more efficient and harmonised air traffic management system. The subsequent report concluded that a FAB would offer flexibility in airspace management, cost savings through the rationalisation of resources and service benefits via more streamlined operations.

In June 2005, we joined Britain's leading airlines, airports and aerospace manufacturers to launch Sustainable Aviation, a pioneering initiative, unique in global aviation, to build a programme for long-term reductions in aviation's impact on the environment.

In the same month, the Training 2008 project was launched from Hurn to create a world-class international training and simulation business centre – an important step in ensuring we are developing the specialists of the future.

Later in the year, our board gave the go-ahead for the iFACTS (Interim Future Area Control Tools Support) system to become operational at Swanwick. Part of the CASPIAN programme, iFACTS will help controllers resolve medium-term conflicts and the resulting workload reduction will boost airspace capacity.

As the year ended, we completed the first regulatory cycle following the PPP. The new regulatory price controls for the next five years (2006 to 2010) – known as Control Period 2 – were set by the CAA after a review which took almost two years.



"We are right on the verge of something really huge for us as a company. Our stand for safety leadership is crucial to that future."

Ian Hall, Director Operational Performance and Director, NERL Business Centre

### Working in partnership

A renewed focus has been placed on effective communication with our customers and also with union representatives, potential partners and suppliers. The Operational Partnership agreement (OPA), established in 2003 has helped to improve the way we work together with airlines to meet demand and capacity challenges and to optimise the use of airspace capacity.

"The OPA provides an ideal forum for NATS and the operators to share information on current and future plans in a transparent manner. This contributes to a better understanding of the relevant issues surrounding the optimum use of scarce capacity and the expectations of all the parties. The operators can clearly help to shape the efficient and cost-effective evolution of the future of ATC capacity."

**Grant Worsley, Air Traffic Services  
Manager, bmi**

"What I've seen is that NATS has become much more customer focused. They're really engaged in our issues. Really listening to us."

**Mark Burgess, Manager  
Air Traffic Services, British Airways**

Safety has always been at the heart of our operation. NATS was the first air navigation service provider in the world to develop and adopt a formal safety management system. The design and implementation of Short Term Conflict Alert (STCA) and the development of the Traffic Alert Collision Avoidance System (TCAS) have been vital in ensuring we are able to meet the demands of ever-increasing traffic numbers. Our challenge to take leadership in safety to another level has included real energy and focus on understanding and reducing level busts and runway incursions. NATS-wide level bust trials have resulted in new insights and 22,000 level bust videos have been distributed to pilots and controllers through the Confidential Human Factors Incident Reporting Programme. We're becoming more proactive in our stand for safety – we've written to 120 airlines about Oceanic safety procedures and initiated improvements which include work at Belfast, Manchester and Gatwick. Our first-ever conference for airport operational safety representatives held in October 2005 is a strong indication of our desire to work in partnership with our customers on these important issues facing our industry.

"NATS' level bust campaign is an example of the air traffic management industry's reaction not just to existing, but to future challenges. The safety message to Europe's air traffic service providers is not just the familiar 'something must be done' but the more positive 'something can be done'. And of course, if it can be done, it must be done."

**Flight International, February 2004**

European co-operation was taken to a new level in February 2006 as we confirmed our joint venture with AENA to develop the Spanish ATM system SACTA to be the platform for both companies' future plans. For NATS, SACTA will initially be installed in the Prestwick Centre when it opens and then in Swanwick, with a new-generation electronic flight data processing system to replace the National Airspace Flight Data Processing System (NAS) – the current FDPS.

“AENA has developed SACTA over more than 20 years so that all the Spanish centres will be harmonised and integrated. SACTA's adaptability will enable AENA and NATS to position our joint venture strategically and competitively in Europe. We have a good partnership and a strong understanding and we are very pleased to cement that through the JV.”

**Francisco Quereda, Air Navigation Director of AENA.**

Cementing the continuing joint and integrated air traffic services in the UK, our long-standing partnership with the MOD was further strengthened the same month with an agreement that will enable military controllers to deliver an en-route air traffic control service to military and other users until at least 2021. There is already a military presence at Swanwick, West Drayton and Prestwick but the new agreement will see military controllers sharing the same flight data processing system. The UK's airspace will be operated jointly as a single entity which will offer operational and cost benefits.

“This is a landmark agreement and a role model for Europe. For the first time, we are demonstrating that air traffic services can be successfully integrated between a privatised air traffic services provider and the government. It offers flexibility in a safe and controlled environment.”

**Lawrence Hoskins, Managing Director, NERL and NSL Business Centres**



**Military controllers at Swanwick, 2005**

“Such an integrated military-civilian approach with military personnel working alongside NATS en-route staff, works to the benefit of all airspace users. This is a world leading concept and offers both operational and cost benefits to Defence.”

**Adam Ingram, Minister of State, Ministry of Defence**

## Expanding our business

The commercial freedom resulting from the PPP offered new business opportunities. Following on from contracts such as Southampton and Luton airports the NATS (Services) Limited (NSL) part of our business has grown – with an ambitious target of £135 million turnover set for 2007. A significant milestone was achieved in August 2005 when we secured our first overseas airport ATC contract – a three-year deal to provide air traffic services at Gibraltar for the MOD. Further growth includes Bristol and contract extensions at Birmingham and Southampton.

Business growth opportunities include our work on other products and services meeting customer needs. In November 2005 we launched 'Firstbrief' – a revolutionary automated briefing product. Replacing paper systems, Firstbrief guarantees data accuracy, ensuring that controllers are aware of the latest changes in situation and procedure affecting the airspace under their control, and that engineers are given the most up-to-date status on the systems they manage. The system is applicable to any industry where operational information must be distributed to staff in a controlled and verifiable way, such as the emergency services, power and transport industries, as well as aviation.

Heathrow's control tower celebrated its half-century in 2005, an anniversary marked by the topping out of a new tower, scheduled for service in 2006/07.

Edinburgh's new tower went live at 22.24 on 15 October 2005. The first aircraft handled was a Gulfstream 5 executive jet travelling from Dallas to Edinburgh. Work on the tower began in May 2004 and culminated in October when NATS engineers fitted out the tower with the latest air traffic control technology, on time and in budget.

“The new control tower is a testament to the NATS staff who have worked hard over many years to secure this state of the art facility. It is a landmark for NATS Edinburgh as we work to safely meet the growing traffic demands at one of Scotland's busiest airports.”

**Keith Meakin, General Manager,  
NATS Edinburgh**





looking to the future

NATS

"NATS is an organisation which had change thrust upon it, but has embraced it, worked with it and is now at a point where it is actually driving change in the industry, forging partnerships, leading technological development. NATS is only just realising what it can really do, and that makes it an incredibly exciting place to be at the moment and a great time to be its Chairman."

John Devaney, NATS Chairman



### Looking to the future

Moves to the Single European Sky will bring consolidation of centres and providers. The creation of Functional Airspace Blocks will be based on practicality rather than nationality. An increasingly global understanding of the importance of networking is emerging.

Technology is racing ahead: tactical controller tools like FACTS and 4D trajectory, safety systems such as Mode S, and the increasing use of satellite navigation, will help increase capacity, improve safety, reduce costs and address environmental concerns by enabling more fuel-economic procedures.

"I genuinely feel that we are on the threshold of really significant change in air traffic control. EFPS; iFACTS; SAATS Mode S; Caspian; the growth of electronic flight databases updated in real time with clearance and intention data will mean that, by around 2010, in our centres and our towers we will remove lots of unpredictability from our system enabling us to be clearer in our flow prediction, demand forecasting and identification of potential conflicts. There is huge potential for safety and service enhancements. This is real breakthrough stuff and it's down to us to make it happen in the next few years!

**Alan Jack, General Manager, Operations Standards and Development**

NATS is already partnering customer airlines and airports to anticipate demand, manage capacity and reduce delay by innovative data sharing and flight planning. We are leading the way in forging joint ventures and other partnerships to create common systems to increase efficiency and share costs. So our journey to lead the way technically, operationally, commercially and politically is well underway. NATS is becoming a different business with strong commercial aspirations, underpinned by our continued rigour in safety and service performance.

"In terms of the air traffic service that is provided, NATS is really second-to-none across our global operation. That's not to say that any of us can afford to sit on our laurels and it's interesting to see the development of work on things like level busts, on R/T communications, on runway incursions and we very much welcome working together with NATS to try and improve the safety environment."

**Andy Shand, Manager Air Traffic Management, British Airways**

“NATS has always stood for improving the way things are done in air traffic management. Our heritage and reputation make us well placed to help shape and develop the air traffic management services of the future across Europe and throughout the world. We must ensure that we are first in line to maximise the opportunities presented by our changing environment and seize the chance to shape the future of our industry.”

Lawrence Hoskins, Managing Director, NERL and NSL Business Centres

## NATS

As well as developing our strategy and market position, we need to consider the way we talk about ourselves as a company, the way we communicate, the way we visually represent ourselves and the way we do things around NATS. To put it another way, our brand.

### It's about being progressive...


By thinking and acting progressively we believe we can change the way our industry does business. Change will mean being open to working in new and different ways with customers and partners – working collaboratively and creatively together to develop new solutions. Being progressive means we will also need to challenge ourselves continuously within NATS to think about new and better ways of operating. Our ability to shape the future of our industry means setting new standards in safety, service and value for our customers.

Living up to our promise to be progressive will stretch and challenge everyone involved in NATS but we believe it will also help us grow. Grow our business, our service to our customers and our reputation.

Our new brand is brought alive visually with the use of stripes, black and white photography and the NATS logo. The stripes build on the concept of safe separation – the core of what we stand for – supported by black and white imagery that captures our world in dramatic profile. The new NATS logo grounds the identity and is designed to communicate solidity and reassurance – but in a modern, progressive way.







However, the NATS brand is far more than a logo. It is a promise we make to people both inside and outside our organisation. Our ability to deliver on that promise through what we do and how we do it, will make us successful. What we say and do is what will make NATS stand out from the crowd over the coming months and years.

**This means:**

Delivering our two-centre, one-system strategy, key features of which include a major relocation programme involving large numbers of our people, implementation of iFACTS and the development of SACTA with our partners at AENA.

Reaching our 21 destinations, designed to move us towards leading the way operationally, technically, commercially and politically and liberating and inspiring people.

Maximising the opportunities created by Single European Sky by continuing to work closely with other European providers and playing a key part in SESAR – an industry wide Single European Sky implementation programme.

Continuing to work together in partnership with our trade union colleagues for the benefit of NATS people and the NATS business.

Developing business and sales opportunities across the world.

Creating a world class International Training & Simulation Business Centre that enables the training of the future leaders in air traffic management.

And most of all, continually striving to achieve better and better safety and service results for our customers enabling us to safely and efficiently handle up to three million traffic movements in the UK by 2012 – a world away from the 18,000 first recorded in 1949.

Thousands of people have been part of building NATS' reputation, from the earliest days to the present day. Thousands more people – employees, customers, suppliers, lenders, politicians and partners – will be part of our future. Being progressive. Challenging. Influential. Customer-focused. Shaping the future of our industry by setting new standards in safety, service and value.

“Our future is only limited by our ability to imagine and our commitment to deliver.”

**Paul Barron, Chief Executive**



## Our headlines...

1920

Croydon opens as London's main air terminal; a rudimentary form of air traffic control involving flags is put into operation

1944

Chicago Convention signed by delegates from 52 countries including the UK embodies post-war standards for civil aviation

1946

First commercial flight leaves newly-opened Heathrow airport for Buenos Aires

1947

International Civil Aviation Organisation established to regulate air transport on a world-wide basis

1949

Harn School of ATC is formed, later becoming the College of Air Traffic Control in 1962

First traffic figures show UK handling some 18,000 flights annually

1950s

Network of air corridors in use today begins to develop

1957

Croydon Airport closes

1961

Patch Committee recommends national organisation to plan and run unified ATC system

1962

National Air Traffic Control Services formed (word control later dropped) – a joint civil and military organisation; is currently handling 470,000 flights annually

1966

London Air Traffic Control Centre opens at West Drayton

1972

Civil Aviation Authority comes into being, incorporating NATS' civil staff; the role of Controller NATS rotates between civil and military personnel

1973

The biggest oil crisis to date causes a massive downturn in air travel. There won't be another blip this big until the US terrorist attacks of 9/11/2001. Orders for the newly-developed supersonic Concorde dry up

1975

Mediator programme complete; Preston air traffic control centre closes and staff merge with Manchester Airport ATC to form Manchester Sub-Centre

1977

NATS achieves full cost recovery in areas under direct control, making it largely self-financing

1978

Scottish operation moves from Redbrae House to Atlantic House

1985

Annual traffic hits 1 million movements for the first time – it has taken 23 years for traffic to double. It takes just 15 years to double again to two million

1990

Monopolies and Mergers Commission calls for separation from CAA

1992

Airport Services is formed

Five-year contract signed with BAA to provide Air Traffic Services at six BAA airports

NATS is the first Air Navigation Service Provider in the world to develop and adopt formal safety management system

Average delay per flight is 22 minutes; despite a million more movements, average delay per flight by 2006 is 22 seconds

1993

Manchester unit renamed Manchester Area Control Centre (MACC) and Airport. MACC becomes the first unit to operate with NATS Operational Display Equipment (NODE)

Government announces privatisation review and directs NATS to proceed with New Scottish Centre as a PFI project

1995

easyJet is launched and Ryanair celebrates its 10th birthday. The European no-frills air travel revolution has begun...

1996

NATS manages its first control tower project to design, construct and equip the new tower at Stansted

Design and implementation of controller short term conflict alert system (STCA) for complex Terminal Control airspace – first in the world

NATS established as a Companies Act company. Directorate of Airspace Policy transferred to CAA/MOD control. MOD role in the management of NATS ceased, to be replaced by the NATS/MOD Operating Agreement

1997

European aviation market liberalised when route licensing restrictions are removed

1998

Labour government announces plans to establish Public Private Partnership for NATS

Airports engineering provides an Instrument Landing System (ILS) to its first external client at Farnborough (TAG Aviation)

1999

European Transport Commissioner Loyola de Palacio launches the Single European Sky initiative

2000

NATS instrumental in the design and implementation of Version 7 of Traffic Alert and Collision Avoidance System (TCAS) software

Annual traffic passes two million for the first time

Legislation enabling the forthcoming PPP is enshrined in the Transport Act 2000

2001

Airline Group takes control of NATS as PPP becomes effective

Manchester airport's second runway comes into operation

Terrorist attacks in New York decimate air travel worldwide; it will take more than two years for traffic to recover

2002

First flight handled from new Swanwick Centre

Re-arrangement of Irish Sea airspace successfully completed in NATS' biggest re-sectorisation

World's first operational Multilateration based ground surveillance system installed at Heathrow

NATS and NAV CANADA announce joint development of Shanwick Automated Air Traffic System (SAATS) to replace Oceanic Flight Data Processing System

2003

January: New Farnborough tower becomes operational

March: BAA becomes a NATS shareholder with approval of post-9/11 financial recovery plan; North Sea re-sectorisation completed

April: First phase of £1 billion investment plan kicks off with start of ten-year, £127 million programme to replace secondary radar equipment at 20 UK sites

July: Thames Radar operation, which included approach services for London City and Biggin Hill airports, moves to West Drayton – accelerated due to flooding at Heathrow

Summer: Move from One Kemble Street in Central London completed as new Corporate & Technical Centre takes shape at Whiteley, Hampshire

October: Heathrow controllers handle last Concorde commercial flight; Work on new Prestwick Centre resumes after two-year suspension following 9/11 terrorist attacks and downturn in air traffic

December: Government publishes White Paper on the future of UK aviation. NATS reiterates that in the aviation industry, infrastructure means airspace as well as land

2004

March: New Clacton airspace arrangements increase capacity by 30 per cent

June: NATS announces its first profit since the PPP

November: Chief Executive Paul Barron introduces 21 destinations setting clear targets for safety, service, value and people; NATS and Irish Aviation Authority commission study into functional airspace block as key step in Single European Sky development

December: Stansted becomes first UK airport to use Electronic Flight Data Processing Strips

2005

March: Two-centre strategy comes closer with announcement that West Drayton-based staff will move to new custom-built Operations Room at Swanwick and to the expanding Corporate & Technical Centre by 2007

April: NATS opens Brussels office

June: NATS joins airlines, airports and aerospace manufacturers to launch Sustainable Aviation – a pioneering programme for long-term reductions in aviation's environmental impact; Training 2008 launches aiming to create a world-class training and simulation business

July: Independent report is published into feasibility of establishing functional airspace block in UK/Irish airspace

August: NATS wins first overseas contract with a three-year agreement to provide air traffic control services for RAF Gibraltar

October: NATS wins multi-million pound 20-year contract to provide Bristol International Airport's air traffic control service

November: New Edinburgh tower opens; Prestwick Centre building work declared wind and water tight; Mode 5 radar displays introduced at Terminal Control, West Drayton

December: NATS completes its first regulatory cycle following the PPP and new regulatory price controls for the next five years are set by the CAA – known as CPZ

2006

February: NATS and AENA confirm joint Venture to develop Spanish ATIS system SACTA as platform for both company's future plans. NATS and the FICB sign a landmark contract worth £74.6 million to provide air traffic control systems for the next 15 years, enabling full cooperation between civil and military on-route air traffic control.

March: NATS rebrands to demonstrate coming of age as commercial, customer-focused service provider

## Acknowledgments

To all NATS employees – past and present – who have accomplished so much and who have helped build a strong, successful company ready to take on the challenges that lie ahead in a changing industry.

First published in Great Britain in 2006  
by NATS Communications, 4000 Parkway,  
Whiteley, Fareham, Hampshire, PO15 7FL

Copyright © NATS

All rights reserved. No part of this work  
may be reproduced or utilised in any form  
or by any means, electronic or mechanical,  
including photocopying, recording or by  
any information storage without the prior  
written permission of the publisher.

Printed and bound in Great Britain.

For more information visit:

Our website: [www.nats.co.uk](http://www.nats.co.uk)

Our intranet site: <http://natsnet/ourstory>

This book is produced on McNaughton Paper  
HannoArt Silk which is from sustainable forests  
and is 100% chlorine-free.

