

# From hero to hubris – Reconsidering the project management of Heathrow’s Terminal 5

Tim Brady<sup>a,\*</sup>, Andrew Davies<sup>b</sup>

<sup>a</sup> *Centrim, University of Brighton, The Freeman Centre, University of Sussex Campus, Falmer, Brighton BN1 9QE, United Kingdom*

<sup>b</sup> *Innovation & Entrepreneurship Group, Imperial College Business School, Imperial College London, South Kensington Campus, SW7 2AZ London, United Kingdom*

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## Abstract

Heralded as the first stage in the regeneration of Heathrow Airport leading up to the 2012 Olympics, the construction of Terminal 5 had bucked the trend. In a world where most mega infrastructure projects fail, the T5 project was not only on schedule, it was on budget. At its official opening by the Queen it was being trumpeted as the 21st century gateway to Britain. But multiple problems emerged on the opening day culminating in the cancellation of numerous flights and thousands of lost bags requiring manual sorting before being returned to their owners. What should have been an occasion for celebration turned into a national disaster. Using accounts drawn from the media, from a House of Commons Transport Committee report and material from research into the construction phase of the project, this paper examines the episode via two theoretical lenses – normal accident theory and high reliability theory.

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## 1. Introduction

It was all going so well. The construction of the Terminal 5 at London’s Heathrow Airport was good news – ‘History in the Making’ as an article in the Royal Academy of Engineering’s house journal put it (Kimberley and Jordan, 2005). Here was a mega-project that was on schedule and on budget since construction had begun, bucking all the trends of previous mega-projects. T5 was seen as the first step in the regeneration of London’s main airport in preparation for the 2012 Olympics.

Two weeks before it was due to go operational the Queen was at T5 for its official opening before an invited audience of the great and the good and representatives (managers and operatives) of the companies who had worked on the project. “It gives me great pleasure to open

Terminal 5 – this 21st Century gateway to Britain and, to us, the wider world,” said the Queen. T5 was a dream facility that would end the nightmare that Heathrow can sometimes be and transform the travel experience according to Ruth Kelly, the Transport secretary. Owner BAA and customer BA (who were to be T5’s occupants) were also gushing with confidence. Terminal Five marks the start of a new beginning for Heathrow said Nigel Rudd, BAA’s Chairman. “Terminal Five is a fantastic facility and our customers will really enjoy the space, comfort and convenience it offers. With the opening of T5, BA and BAA have an opportunity to make air travel, both into and out of the UK, once again a calmer and much more enjoyable experience.” said BA chief executive, Willie Walsh.

So, after 19 years in the planning and construction, Heathrow’s Terminal 5 building was nearing the final whistle. Everyone was expecting a resounding victory. Instead, in the last minute of normal time, they score a spectacular own goal. On the day of its operational opening, March 27th, 2008, just two weeks after the Queen had been

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\* Corresponding author. Tel.: +44 1273 877932; fax: +44 1273 877977.  
E-mail addresses: [t.m.brady@bton.ac.uk](mailto:t.m.brady@bton.ac.uk) (T. Brady), [A.C.Davies@imperial.ac.uk](mailto:A.C.Davies@imperial.ac.uk) (A. Davies).

officially opening the Terminal and those quotes above had been given, disaster struck. A combination of problems led to complete chaos with passengers unable to check-in hold baggage and 68 flights had to be cancelled. The headlines in the papers next day were uncompromising. In a reference to T5's campaign about 'Making History', the Times piece was headlined 'Making History? It is memorable but for all the wrong reasons'. The chaos continued into the weekend with more flight cancellations and baggage being lost.

This paper asks: How could this disaster have happened? We piece together accounts of the problems that ensued during the first few days of opening and contrast this with the promises that had been made beforehand. We examine the opening disaster through two theoretical lenses which have been used to explain other disasters and accidents – normal accident theory and high reliability theory. On balance, rather than this coming as a big surprise, we suggest that the events of the opening day should be seen as a 'normal accident' (Perrow, 1984), one which we might have expected, given the complexity of the system. Further we suggest that management in both BAA and BA became over-complacent to the extent that once they thought they had surmounted the considerable issues related to building such a vast and technologically sophisticated terminal they suffered from technological hubris (Hughes, 2004) and forgot about the people issues related to the successful functioning of any large technical system (Hughes, 1987).

This paper draws on three main sources: documentation such as reports and articles appearing in the general and construction press in the immediate aftermath of the disastrous opening; the House of Commons Transport Committee report – 'The opening of Heathrow Terminal 5' (House of Commons Transport Committee, 2008); and information collected by the authors during a study about the learning gained from involvement in the T5 project. In the next section we show how BAA and BA built up expectations for T5 in the years and months preceding the opening. We go on to analyse the events of the opening day and show how an accumulation of relatively small problems combined to create the catastrophic outcome. We then contrast the focus of the efforts to transform the approach to managing the design and construction phases of T5 with the management of the operational phase.

## 2. The promise of T5

In the years and months preceding the opening of T5, BAA and BA had been pushing out press releases which promised a massive transformation in the performance of Heathrow Airport. For example, on March 27th 2007, exactly 1 year before the scheduled opening date, a BAA press release was put out announcing that over 90% of the construction-related work had been completed and that the project remained on-time and on-budget. The plan was for BAA to hand over the terminal to BA in September 2007 for six months of proving trials, involving more than

16,000 members of the public who would be recruited to act as passengers to thoroughly test every aspect of the building including car parking, check-in, baggage systems, IT systems and security.

The press release (Distributed by PR Newswire on behalf of BAA plc, 2007) quoted Tony Douglas, CEO of BAA Heathrow (who had previously been T5 Managing Director) as follows:

*"London is a world city, a global financial centre and needs a world-class airport. T5 is already a testament to the skill and hard work of the thousands of people, including architects, planners, construction workers, airport and airline staff, who have together made the building happen. With just 366 days to go there is still much to do, but we are confident we are on track to deliver a world-class experience that Heathrow's passengers deserve."*

But, according to Douglas, T5 was only the start of creating the new Heathrow. He went on to say how

*"...when T5 opens and 30 million passengers move out of existing terminals, for the first time we will have space to breath in the central terminal area and have a once in a lifetime opportunity to redevelop the rest of the airport and bring it up to a comparable standard to T5. By 2012, we aim to have either re-built or redeveloped our existing facilities and returned Heathrow to its rightful status as the world's leading international airport. We will be proud to welcome the world's Olympians through our gates."*

Douglas's optimism was matched by Willie Walsh, CE of British Airways:

*"This is a historic breakthrough which will transform the airport experience for our customers. T5 will mean less queuing, faster baggage systems and better punctuality. For comfort and convenience, it will exceed the best you can find at any other airport. The next twelve months will be extremely busy as we continue with our preparations for the move. Our plans are on track and we will be ready for 27 March, 2008 when the first flights begin."*

These expectations continued to be built up during the year, and, at the official opening, two weeks before the operational opening, confidence was still high as we have seen from the quotes in the introduction. In one other memorable quote which he would no doubt come to rue, BAA's strategy director, Mike Forster, said: 'We have a world-class baggage system that is going to work perfectly on day one.'

But, even amid all the fanfares there were some qualification from senior people in BAA and BA. Andrew Wolstenhome, BAA's Capital Projects Director – who was previously Project Manager of T5 was quoted in a construction industry journal thus:

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