

Heathrow Terminal 5 Project

Worker engagement case study 2

This case study is part of a series of case studies, which give examples of best practice when engaging workers to improve health and safety in the workplace.

Introduction

This case study outlines the ways in which high standards of workforce consultation and engagement in health and safety are contributing to the exceptional safety record being achieved by the Terminal 5 project.

The Terminal 5 project presents a wide range of health and safety risks. All the normal civil engineering processes are taking place, so transport movements, working at height, lifting operations, excavations and confined spaces are all common hazards on site. Innovative solutions are being adopted, such as pre-fabricating sections of the terminal buildings off site, and assembling the roof sections at low level. In some sections of the project, up to 70% of construction work is carried out off site.

In order to achieve safe construction, the management team recognised from the start that the project would need to pioneer and then sustain new industry standards of health, safety and security. This case study examines how one part of the project, the Terminal 5B (T5B) section, has developed effective methods of ensuring workforce participation, and became the first section of the project to achieve one million safe working hours without a reportable accident.

The Safety Committee

The 5B project team is responsible for the construction of the second terminal building, with the tunnels of the Track Transit System connecting T5B to the main terminal (Terminal 5, Concourse A). Around 400 workers are engaged in construction on 5B in January 2005, with completion of this section scheduled for 2006.

The 5B project team includes full-time safety leader Clive Johnson, employed by BAA, together with other dedicated safety professionals from the 5B suppliers. The Safety Leadership team meets monthly to discuss progress, and to

Project fact file

Heathrow's Terminal 5 is one of Europe's largest construction projects. Work started in 2002, and the first passengers are scheduled to use the terminal in spring 2008.

The project includes three massive terminal buildings, as well as aircraft stands, bridges, 13.5 km of road and railway tunnels and associated infrastructure on the 251-hectare site. Around 6000 people are involved in the construction work at any one time. The client for the project is the British Airports Authority (BAA) and many of the UK's leading contractors are involved.

The Terminal 5 project is broken down into 16 major projects, managed from open-plan offices on site, incorporating integrated management teams made up of BAA staff with management teams from the key suppliers.

The client, BAA, is working with all its suppliers in a groundbreaking partnership contract which allows for non-adversarial joint working between all parties.

There is a dedicated occupational health team on site, who spend about two-thirds of their time on preventative work, as well as providing a comprehensive treatment and emergency response service.



Figure 1 Electrician Phil Rayment, who chaired the Safety Committee meeting on 27 January 2005

consider the outcomes of the fortnightly safety committee meeting.

The Safety Committee consists of about 15 worker-representatives from the major suppliers and sections of the T5B project. Senior project managers from key suppliers attend, with BAA's safety leader in an advisory role. The safety leadership team includes a member of the Safety Committee to ensure that the workforce is represented at all levels.



Figure 2 Workers attending a daily activity briefing

One or two of the worker representatives are appointed and trained by trades unions. The others are a mix of volunteers and representatives appointed by their own companies. The committee is chaired in rotation by one of the workforce.

The committee meeting dates and times are well advertised around the site by posters, giving advance opportunity for workers to raise concerns with their representatives. Meetings are minuted, so matters raised can be followed through to ensure they are dealt with.

On 27 January 2005, it was the turn of electrician Phil Rayment. The meeting started at midday, lasting about an hour and a half, and was an opportunity for the 2004 project figures to be reviewed:

- two periods of one million accident-free hours;
- a 12% reduction in reportable accidents in 2004 from 2003;
- a 45% reduction in minor injury rates, coupled with improved near miss reporting.

The near-miss reporting system provides vital intelligence for the committee. Every time a significant near miss is reported, a safety alert is produced and distributed around the site within 24 hours. This provides basic details about how the incident was caused, and what should have been done to prevent it.

Recent incidents were also discussed at the 27 January meeting. These included a slip on one of the terminal roof sections, resulting in a fractured elbow, and three minor eye injuries – it was reported that these resulted from incorrect use of eye protection. Encouragingly, an incident was reported from just before Christmas when three workers who were adjacent to a concrete pump were showered with concrete when a joint failed, but because they were wearing goggles, serious eye injuries were prevented.

Most members of the committee contribute to the meetings. Issues of welfare, housekeeping and safety are all discussed. The managers respond to the concerns raised and timescales



Figure 3 Electricians at work, following the daily activity briefing

are set for action. The agenda includes the opportunity to raise any matters that concern committee members.

Commenting on his experience of the committee, Michael Firmin, an Amicus Safety Representative, said that he found it: ‘satisfying, knowing that I can make a contribution to safety, to keeping my mates safe. I am pleased that I can raise issues on this committee and know that they will be dealt with.’

The daily activity briefing

On T5B, one of the key methods of ensuring that all workers are engaged in the process of managing health and safety on site is the daily activity briefing (DAB). This is part of the ‘Incident and Injury Free’ campaign adopted by the site.

All team supervisors carry out a DAB before starting work. The supervisor goes through the method of work, and checks with individual workers to make sure everyone understands how to work safely, and also how to control the risks to other gangs who may be working nearby. Every worker has the opportunity to question the supervisor or make suggestions to improve the working method.

The benefits of a safety culture

‘There is a huge benefit in having the management team co-located and integrated with the client, designers and the workforce. This is a truly collaborative environment. The workforce do raise their concerns and with support from the management team, we deal with their concerns and suggestions.’

Martin Quaid, Production Leader for T5B

Terminal 5 has reaped the benefits from this approach with:

- a safety record four times better than the industry average;
- a working environment that attracts skilled workers;
- positive feedback from their insurers; and
- a project that is currently on budget and ahead of schedule.