

Most people are very familiar with the movie *The Great Escape* but may not be familiar with it as a project executed in the spring of 1944. This series of articles looks at the project from a modern perspective. In part five Mark looked at cost management. This article looks at the fifth of the project management knowledge areas of PMI's PMBOK – quality management. In project plans the idea is to identify the required quality characteristics and build the quality assignments into the schedule. Quality was ingrained into the escape project from the scrutiny of forged documents to civilian clothing, to tunnel construction.

All projects need quality management. The question is how much and to what degree. Preferably this is determined up front by what you can afford, and what you can get away with.

In *The Great Escape* the concept of quality management may seem somewhat unrealistic and a less likely used PMBOK knowledge area because quality concepts were not fully developed till the 1950s. However, this is simply not the case.

### Planning the approach to quality

Clearly defining the quality goals of the project in the quality management plan ensures that quality activities are planned for, resources are assigned, and commitments are agreed to. Quality was important to the escape and had to be planned for and considered in everything from the rigour of the tunnel engineering through to the escape aids, civilian clothing, and documents that would all come under very close scrutiny. Effectively, all these could affect the project to a different degree, from severely impacting on the escape, to making or breaking the project.

Figure 1: The tunnel entrances were the most important things to hide



## Project lessons from the Great Escape

by Mark Kozak-Holland

### Part 6: Project quality management

Among the most important areas in this respect were the three tunnel entrances. These were the most likely parts of a tunnel to be found and therefore they had to be exceptionally well concealed. Inordinate amounts of time were spent in planning and coming up with an imaginative way of concealing the entrances, and resources were poured into this early in the project.

#### Identifying the required quality characteristics

There were certain deliverables that had to be nearly perfect, like travel documents, civilian clothing (disguises), and the escape tunnel itself, especially the entrance. The quality characteristics specified that perfection was required in these areas, with no tolerance for mistakes. Therefore, these deliverables had to be very closely monitored.

#### Building the quality assignments into the schedule

Quality had to be made part of the schedule with regular, routine inspections. This was straightforward, as there was no shortage of project team members (600 POWs).

#### Performing quality assurance

Projects need to provide evidence that they are conforming to a quality assurance process. This evidence typically consists of project work products and is made available to the quality inspector to confirm compliance.

Previous escape attempts gave the escape committee invaluable experience and helped highlight the ways in which a plot could fail. Quality assurance was done at a local level within the functions, but inspections also took place through the escape committee and selected project

team members. This built-in quality testing had to be done from the project outset.

#### Performing quality control

Typically done through work product inspections, quality control is an important mechanism for effective, early, defect identification and removal. It is also known as static testing or peer reviews, and it includes inspections and document reviews of critical work products. The emphasis is on inspections of all critical work products 'early and often', with all team members participating in these assessments.

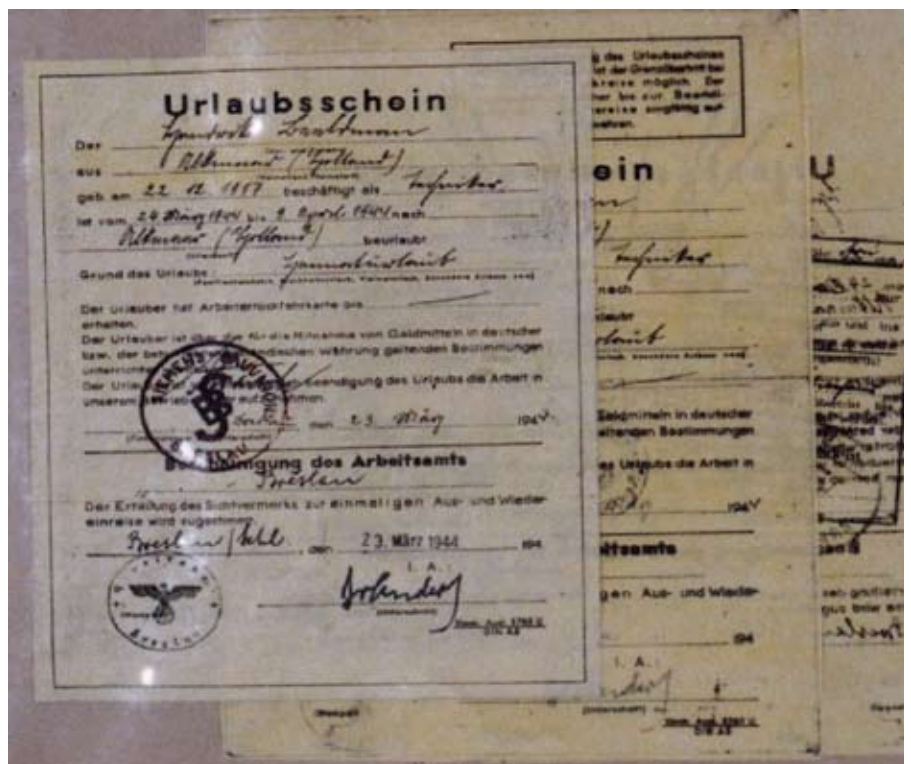
Mistakes could not be tolerated; even one slip-up would give the game away, so the escape committee embedded quality into every activity. For example:

- Tunnel construction had to be done in secrecy and with safety. Tunnels and shafts were continuously inspected for any signs of potential failure, as any cave-in could be fatal. For example, wooden bracing was checked for cracks or excessive forces, and any traces of falling sand. The evening shift in the tunnel used compasses and spirit levels to gauge whether the tunnel was set true to north and perfectly straight and level. The nightly inspection was rigorous in identifying any dangers.
- Forged documents would be scrutinized, so they had to be perfect. In the Travel Department over 50 forgers (mainly artists) worked three to five hours per day for over a year. They had to sit by the windows, working meticulously until they had headaches, as one careless slip could cost four days of work on one document. So a 'buddy' system was set up between pairs of forgers who would continually

Figure 2: A selection of the output from the forgery factory, including passes and documents that were indistinguishable from the originals

inspect each other's work and documents off the 'production line'. Any forgery that was not perfect was scrapped, and this is where project quality control came in. It was no easy task as, in all, over 400 forged papers were required. This included passports with photos, passes for excursions like military leave, Solbuch cards (general identity cards combined with pay books), papers granting permission to be on Wehrmacht property, and documents for foreign workers returning home.

- With only one tunnel entrance, it was critical to make sure the trap door to the tunnel entrance was well concealed. Independent and trusted 'inspectors' were invited into the hut containing the tunnel entrance and asked to find the tunnel.
- Civilian clothing had to meld the wearer inconspicuously into a crowd. Close inspections were made by tailors as POWs modelled their disguises.



## Conclusion

Bushell and the escape committee understood how a few critical areas could completely let the project down. They were willing to make the necessary investments very early to protect these. Quality management was a critical area for the project.

Mark Kozak-Holland's latest book in the Lessons-From-History series is titled 'Project Lessons from the Great Escape (Luft III): It draws parallels from this event in World War II to today's business challenges. Mark is a Senior Business Architect with HP Services and regularly writes and speaks on the subject of emerging technologies and lessons that can be learned from historical projects. He can be contacted via his website

at [www.lessons-from-history.com](http://www.lessons-from-history.com) or via email to [mark.kozak-holl@sympatico.ca](mailto:mark.kozak-holl@sympatico.ca). For more information on the Great Escape Memorial Foundation see [www.thegreatescapememorialproject.com](http://www.thegreatescapememorialproject.com).

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