Project lessons from the Great Escape

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Stalag Luft III

Part 2: Project scope management

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 is the subject of Mark Kozak's new series which will alternate from the next issue with his fascinating story of the Titanic. Part 1 set the scene while this article looks at the project from a modern perspective and the first of the project management knowledge areas of the PMI PMBoK: scope management.

In 1943 as the Allies stepped up the number of aircraft over Europe there was a steady increase in the number of captured Allied airmen. The overcrowding of prisoners of war (POW) at Stalag Luft III led to the building of a new extension, the North Compound.

Figure 1: Allied aircrew preparing for a mission

Roger Bushell, the Big X, or leader of the escape committee, had been disappointed with the number of successful escape attempts and 'home runs'. He expressed to the escape committee the reality that there was a poor track record and too many disparate approaches to the escapes.

'We've all dug tunnels in PoW camps scattered all over Germany. In East Compound we dug, lost or abandoned at least 50 tunnels.'

Bushell was determined to change this losing situation. The relocation of POWs to the North Compound would give them a fresh start and a new opportunity, an incentive to rethink strategy, and approach to escapes. He delivered the following impassioned speech to the escape committee, which had the seeds of a project charter:

'In North Compound we are concentrating our efforts on completing and escaping through one master tunnel. No private-enterprise tunnels allowed. Three bloody deep, bloody long tunnels will be dug – Tom, Dick, and Harry. One will succeed.'

Bushell was laying out the scope of a project on a scale that had not been tried before. In today's world, project scope management can be defined as the sum total of all the products and requirements, or features – the totality of the work needed to complete a project. Bushell laid out his high demands for the project. He asked the escape committee for various project deliverables: 200 passes to be forged, 200 civilian suits, 200 compasses, and 1,000 maps.

As work started on the new compound the senior British officer approached the Kommandant and suggested that a few POW working parties help in the building of the new compound. The Kommandant, believing the offer reflected the right spirit of cooperation and was likely to raise morale, unknowingly introduced members of the escape committee into the compound.

They paced and mapped the layout of the camp, calculated distances and angles, and surveyed the area outside of the wire. They began to put together all the details for the escape, such as where to dig the tunnels and how long they should be. One of the German surveyors handed over the plans for the compound, and the POWs stole them and carried them back to the camp to be studied. These diagrams revealed the underground sewage system and two tunnels leading out to nearby drainage areas, although too narrow for escape purposes.

In project management the primary tool to describe a project's scope is the work breakdown structure. Bushell did not define this on paper but he carried it in his head.

Those who knew him said: 'He had a mind like a filing cabinet, and that was one of the reasons he was so brilliant at organization'.[1]

Figure 2: Squadron Leader Roger Bushell

The escape committee had to carefully consider the many elements that defined the scope of the escape project, for example:

- number of tunnels dug, determined by the number of concrete foundations available (hut footings) and the risk of discovery
- depth and length of the tunnels, determined by the distance from the camp to the woods and available tunnel-shoring materials
- scope of intelligence and security required as, at any time, six guards were wandering around in the compound
- number of escapers that could get through a tunnel in a given night
- equipment required for completing the tunnel, and also for escapees through the tunnel.

The preliminary project scope was very much influenced by the availability of resources, and any restraints on these. The conditions inside the camp itself made the project very dynamic and this had to be considered by Bushell when defining the scope. Their captors could be unpredictable and took actions on a whim. For example, POWs could end up in the 'Cooler' (prison) or, worse still, be moved to another camp, and privileges could be removed, like access to Red Cross parcels. Routines were often changed to try and catch POWs off-guard. Similarly, changing conditions outside the camp could prevent Red Cross parcels from getting through.

The scope was also defined by the calendar and the seasons. For example, tunnelling in the winter was a challenge as any sand dispersal on the ground was not possible. In the spring, the thaw of heavy accumulations of snow could have a significant impact on any tunnel, with the weight of the melt bearing down on it. Summer 'traditionally' was escape season, as any other time was not conducive to surviving in the open without shelter. So the scope of the project was driven by seasonal windows.

Conclusion

Bushell and the escape committee were well aware of all these factors, as many of the POWs had been incarcerated for up to four years. They knew the unpredictability within the camp increased the risk, as did the large scope of the project. But in the end, Bushell's approach was deemed to have the best probability of success, and the original project scope remained unchanged.

[1] *The Great Escape* by Paul Brickhill