

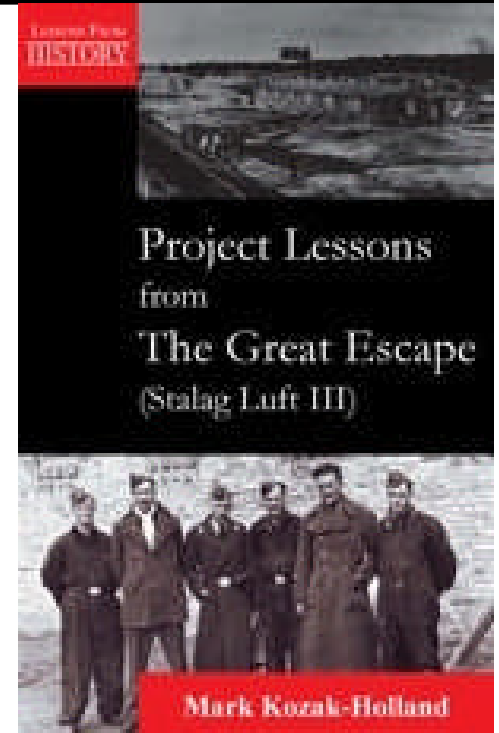
LESSONS FROM
HISTORY

Application of “Project Lessons from the Great Escape (Stalag Luft III)” into higher learning

**Lessons From History series
in Higher Education
Case Study from the University of
Denver – University College**



**Presentation
April 5th, 2010
Mark Kozak-Holland**



**“Lessons From the Past that Assist the Projects of
Today to Shape the World of Tomorrow”**

www.lessons-from-history.com

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- **This presentation will describe:**

- What the course is about?
- Why the Great Escape book was selected?
- How and where it is used in the course?
- When the course is run?
- Outcomes
- Reviews of the Great Escape book

University of Denver, University College

- **University College provides access to education at the University using evening, weekend, and online formats for accelerating learning**
- **Ray Kaufman is an adjunct professor at University College and teaches ICT 4115 Project Management Dynamics**
- **He has an MBA from University of Phoenix and a BSBA from Xavier University. His professional certification is a PMP from the Project Management Institute.**



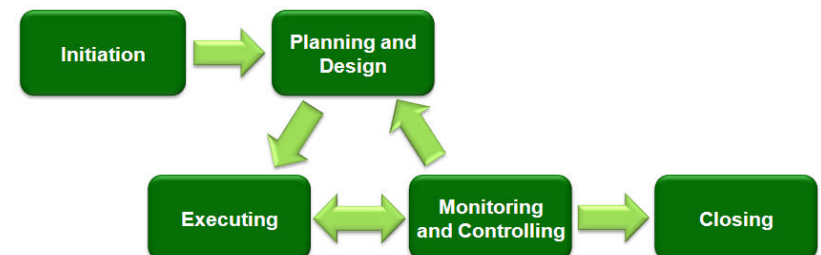
Ray Kaufman talks about the students and class

- *“My students are at graduate level and all have completed their undergraduate degree. About 80% work full time and attend class at night, online, in the classroom or on weekends. The age is mid 30s, but range to the 50s.*
- *They have limited project management experiences or duties. The hands on experience is measured in less than 10 projects with each project generally not exceeding 3 months.*
- *The project roles were mostly coordinators and limited authority. They are getting prepared for their next promotion and more authority. Information Technology projects (software, hardware, facilities) is most their experience with engineering or construction a close second.” RK*



What ICT 4115 Project Management Dynamics is about?

- **The advanced course is about using project management.**
 - *“We will review project management principles and put them to practice. We will have hands-on experiences with managing team dynamics, changing project requirements, and use project management tools.”*
- **Prerequisite:**
 - Principles of Project Management or the ICT 4100.



Course outcome and goals – students will

1. Examine roles and responsibilities as a subproject manager and as a program manager.
2. Explain how teams work and apply team building activities in teams working in virtual team environments.
3. Analyze a master project plan (program) for a complex program, breakdown a master project into subprojects, optimize plans, and evaluate the impact of changes on subprojects and the program.
4. Apply processes, tools, and techniques to monitor & control subprojects and a master project undergoing dynamic change.



PD-Trak Master Project Schedule				GATE MILESTONE CALENDAR												Ratio							
PROJECT NAME	Status	Current phase	Next review type	2005	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006		2006	2006	2006	2006	2006	2006	
Turbo charger life extension	Active	Development	P-Gate																				
Rollbacks management software	Proposed	Proposed	Start																				
High efficiency compressor	Active	Development	P-Gate																				
Best generation, high capacity hand drive	Proposed	Proposed	Start																				
DVIDM optical power meter	Active	Development	Update																				
Rollback system release	Proposed	Proposed	Start																				
Rollback test detection system	Active	Feasibility	D-Gate																				
High power compressor	Active	Development	P-Gate																				
Enhanced Equities Trading Sys	Proposed	Proposed	Update																				

Course outcome and goals – students will

5. Work in a PMO environment to plan and resolve project issues.
6. Use the Project Management Information System (PMIS) to help plan, integrate, evaluate, monitor & control projects.
7. Use the PMIS and virtual tools to flag, communicate, and help resolve potential problems.
8. Present subproject/master plans and progress reports to stakeholders and executives.
9. Analyze projects and present an investment recommendation to project sponsor.

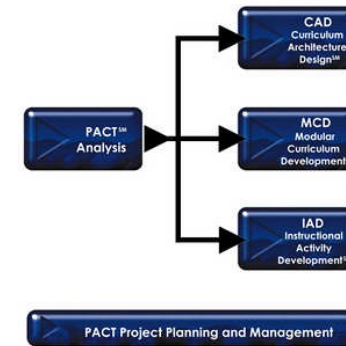
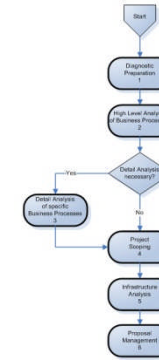


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 - Reviews of the Great Escape book

The Lessons From History series is part of the course

- **Project Lessons from the Great Escape is integrated into:**
 - ICT 4115 Project Management Dynamics
 - It has been used in 4 classes to date
 - 2009 to 2010
 - Over 60 students

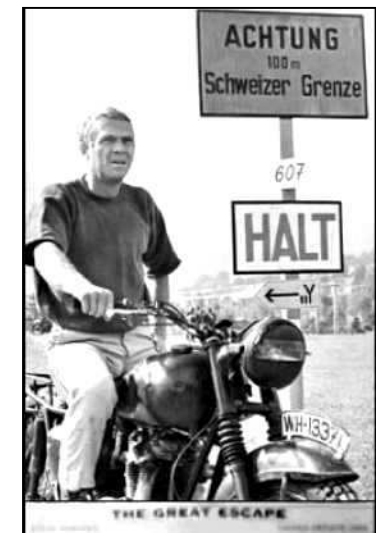
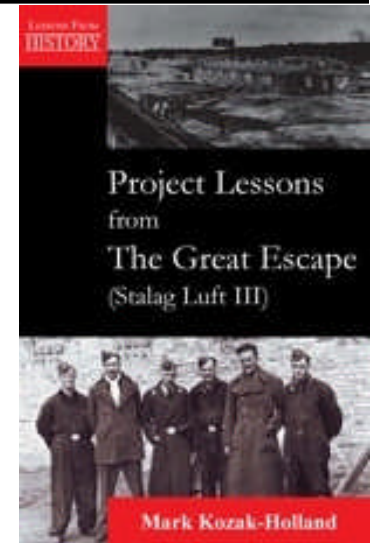


LESSONS FROM
HISTORY

This series uses relevant case studies to examine how historical projects and emerging technologies of the past solved complex problems. It then harvests the lessons learned on these past projects and applies them to today's projects.

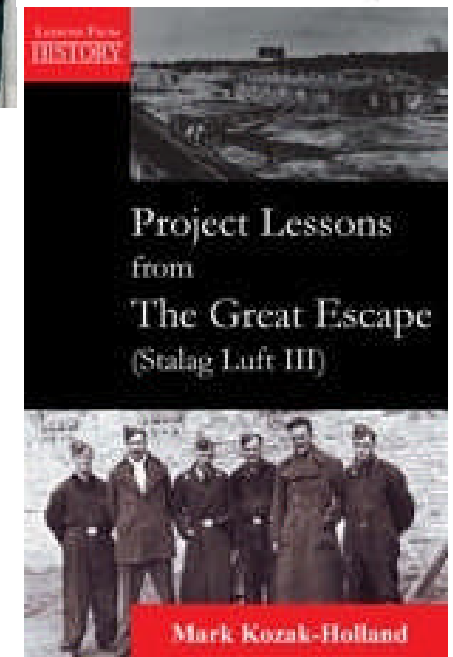
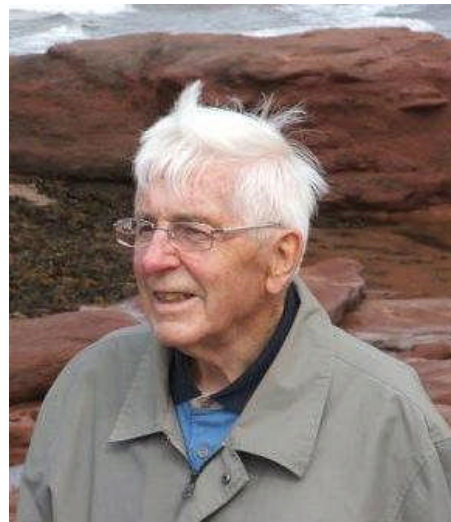
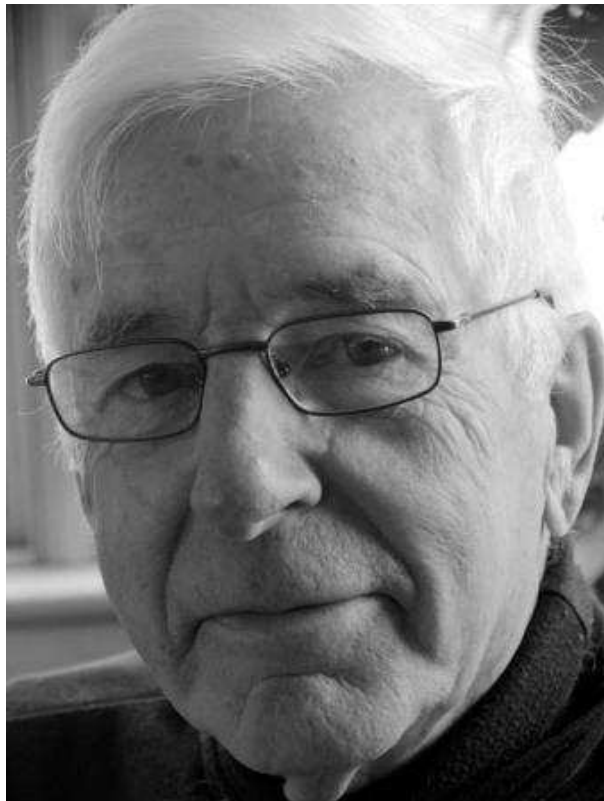
What is the book Project Lessons from the Great Escape about ?

- **Incredible story of mass escape of 76 Allied PoWs from Stalag Luft III in March of 1944.**
- **Today we can learn from this project.**
 - How it was originated and developed?
 - How complex problems were solved?
 - How it was managed and implemented?
 - How it fostered a specific approach?
 - Its outcome based on events in March 1944?
 - How it scores against PMBOK KAs?
 - Little to do with motor bikes but planning and managing change



The book advisor was Dr George McKiel (POW survivor)

- George represented a number of POW survivors



Ray Kaufman talks about why the Great Escape book was selected for the course?

- *“I wanted to start the course with a project that put reliance on clear communications and people working for a common goal. My students needed to see the project story unfold before them and relate it to the PMI 9 knowledge areas.” RK*



<p>4. Project Integration Management</p> <p>4.1 Develop Project Charter 4.2 Develop Project Mgt Plan 4.3 Direct and Manage Project Execution 4.4 Monitor & Control Project Work 4.5 Perform Integrated Change Control 4.6 Close Project or Phase</p>	<p>5. Project Scope Management</p> <p>5.1 Collect Requirements 5.2 Define Scope 5.3 Create WBS 5.4 Verify Scope 5.5 Control Scope</p>	<p>6. Project Time Management</p> <p>6.1 Define Activities 6.2 Sequence Activities 6.3 Estimate Activity Resources 6.4 Estimate Activity Duration 6.5 Develop Schedule 6.6 Control Schedule</p>
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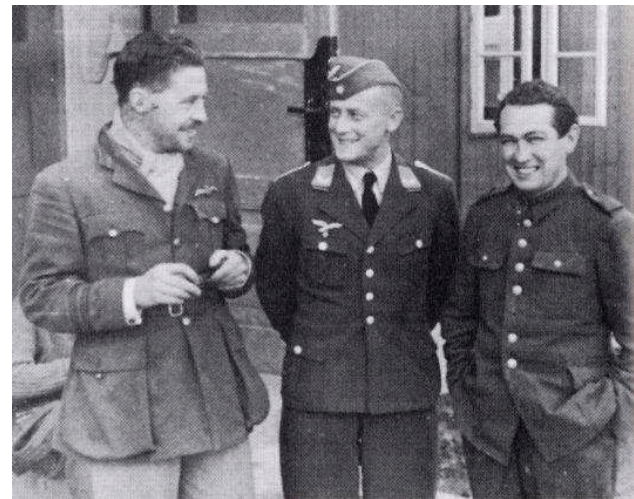
Ray Kaufman talks about what the Great Escape book gives the class?

- *“The students are seeking experience and hands on understanding of projects. Some are awestruck on using PMIS tools or the technology gets in the way. By using a historical story they see practical examples of the PMI 9 knowledge areas before it was codified. The movie provides a good jumping off point for discussions by comparing the historical facts to what changed in the movie. It is another way of using the PMI 9 knowledge areas.”*
RK



Ray Kaufman talks about how the Great Escape book helps students learn?

- *“The book is a quick read and the movie paints a visual story. We can identify with the characters and understand their plight and struggles. That frames the need for project management. It provides motivation to find out the ending. While they are on that journey they read examples of problems and how they were overcome using the project management framework. They can judge if they would make the same mistakes or could fix the problems.” RK*



Ray Kaufman talks about the benefits of using this approach?

- *“I start my students with reading the first 5 chapters and writing a project scope statement. Before they know the ending, I want them to set the framework and project objectives. They form opinions and prepare to present them to the rest of the class. The research and reading with a purpose helps to strengthen their learning experience. The book provides them a guide for each of the knowledge areas. They gain project management knowledge while reading about problems and how they were solved.” RK*



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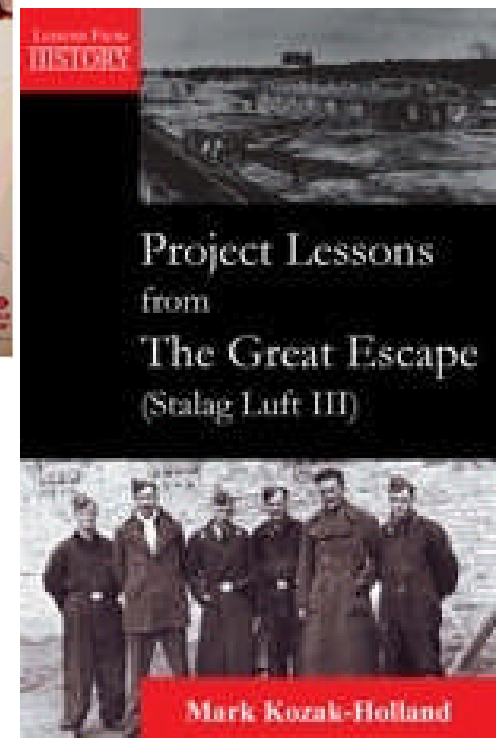
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Schedule for the course

- **Read the book and watch the movie by 3/21, Sunday**
- **Post your Great Escape scope statement, 3/22, Monday**
- **Discuss your Great Escape scope statement in class 3/23, Tuesday**
- **Get feedback before 3/29 assignment, Monday**
- **Post your Point of View results analysis, 3/29 Monday**
- **Make a 5 minute presentation and post online, 3/30 Tuesday**
- **Review and comment on your posting comments until, 4/2 Friday**
- **Knowledge and memorable experiences in 2 weeks**

How and where it is used in the course?

- **Students begin by**
 - Watching the movie:
 - The Great Escape, 1963, John Sturges Director and Producer
 - Reading the book:
 - Project Lessons from The Great Escape, by Kozak-Holland, M, Multi-Media Publications Inc., 2007, ISBN: 978-189518602



Week 1 – Tasks relate to understand the scope of the project

- All projects start with some form of a scope statement. It may be formal or informal.
- Please write the scope of this project. What are the project objectives?
- Keep your scope to two pages or less.

The Great Escape

By: Peter White

Project Scope Statement

Project objectives

- To provide an escape route for 250 POWs who are given the resources to reach a safe zone and return to the front lines.

Product scope description

- All men escaping through the tunnel will be provided the proper travel documents, attire, maps and food to reach a safe zone.
- The tunnel will be completed and an escape will occur between April and September.
- The German army will expend significant resources in attempting to find the escaped men.
- Internal security measures to ensure the plan is not uncovered before it is launched.
- Create 3 tunnels of which at least one will remain undetected and used as an escape route for 250 men. The tunnels will be 30 feet deep and place the escape hole into the wooded area.

Project requirements

- Staff designated to plan, lead and manage the following areas: internal security, intelligence, tunnel engineering, document production, clothing production, map making, supplies, compass factory, dispersals, dispersals divisions, and cultural training.
- Internal communication system to hide the plan from the guards and to alert POWs of an approaching guard

Project boundaries

This project will only place men on the outside of the camp with tools and language needed to escape Germany and eventually enter an Allied occupied territory. No plans, weapons or contacts will be provided to help them once they are outside of the POW camp. These items they will need to procure on their own.

Project deliverables

Deliverables needed for construction

- Lumber & supplies needed for within the tunnel structure
- Tools for digging
- Plan for dispensing of dirt
- Manpower schedule
- Lighting in tunnel
- Identification of tunnel locations
- Projected date of completion
- Internal security and communication system
- Ventilation system

Deliverables needed for each escapee

- Travel and country documents with personal photos
- Non-allied uniform clothing
- Maps
- Compass
- Cultural training including language lessons

Product acceptance criteria

Items will be inspected and deemed acceptable or unacceptable by the Escape Committee. The Big X has ultimate authority to override any Escape Committee decisions.

Project constraints

The project constraints are: POW camp location, guards, physical barriers to the outside, twice a daily roll call, survival skills including language, outside transportation and seasonal weather patterns.

Sample set of scope statements

The Great Escape

Gary Bartle

Project Scope Statement

Project objectives

This is to allow 250 men to escape from a German prison camp using the available resources. The project activities should be hidden from the camp authority, because there is high risk of getting caught. This project should start and finish as soon as possible.

Product scope description

The plan will build three tunnels to allow the 250 men to escape from the camp. The building process should be hidden from the camp guard and authority. After escaping from the prison the goal is to escape from Germany

Project requirements

The tunnel should be good enough so that all men will be able to escape. Planning for the cloths and other materials needed to complete the escape. The forged documents should be accepted by the German without noticing the forge. Men should train on German language and know some German culture.

Project boundaries

The project boundaries limited to enable the men to escape from the camp without been notice and having the tools and the language that will help them to escape out of Germany. The project does not include transporting the prisoners outside Germany, but the prisoners will need to make their effort to make that happened.

Project deliverables

- Project Plan
- Creation of tools for digging
- Identification of tunnel locations
- Digging of tunnels
- Dispensing of dirt
- Preparing forged documents
- Language Training
- Clothing
- Maps

Product acceptance criteria

The project will be accepted and completed if all men been able to escape safely. After that they will try to get out of German.

Project constraints

The project needs to be finished as soon as possible (before the winter).
The camp is on isolated location.
Limited resources and tools available.
The Camp highly guard and very risky to escape.

Project assumptions

They will be a good plan for escaping.
All men will work together as a team.
Necessary changes will be made frequently and immediately as needed.

Initial project organization

Big X

Christopher Edwards 2008

Project Lessons from the Great Escape

John Parks

Project Scope Statement

The stakeholders are the POWs assisting with the execution of the plan and those planning to escape once the plan is completed. The main goal of the captives is to escape from the prison. The driving factors of this project are health concerns, safety concerns, and boredom. The properly executed plan is intended to get prisoners safely out of the camp to neutral territory by digging three deep tunnels that will serve as escape routes and by using tactics that prevent discovery and recapture. Each prisoner involved is assigned with a specific responsibility and is expected to complete their tasks. In addition to completion of the tunnels, deliverables will consist of 200 forged passes, 200 civilian suits, 200 compasses, and 1000 maps.

Project objectives

- Escape from the camp
- To make it to neutral territory

Product scope description

- Digging a deeper hole then the standard tunnel
- Coming up with 3 different alternate tunnel plans

Project requirements

- Leadership
- Manpower
- Tools
- Dedication
- Individual roles and responsibility

Project boundaries

The objective is to get the captives outside of the camp and provide them with necessities required to complete the escape. It does not include a specific plan on how to escape from Germany.

Project deliverables

- Passes – to get passed checkpoints
- Clothing – To disguise themselves so that do not appear to be the enemy
- Compasses – To give escapees a sense of direction
- Maps – To help escapees plan a route to neutral grounds

Product acceptance criteria

Defines the process and criteria for accepting completed products.

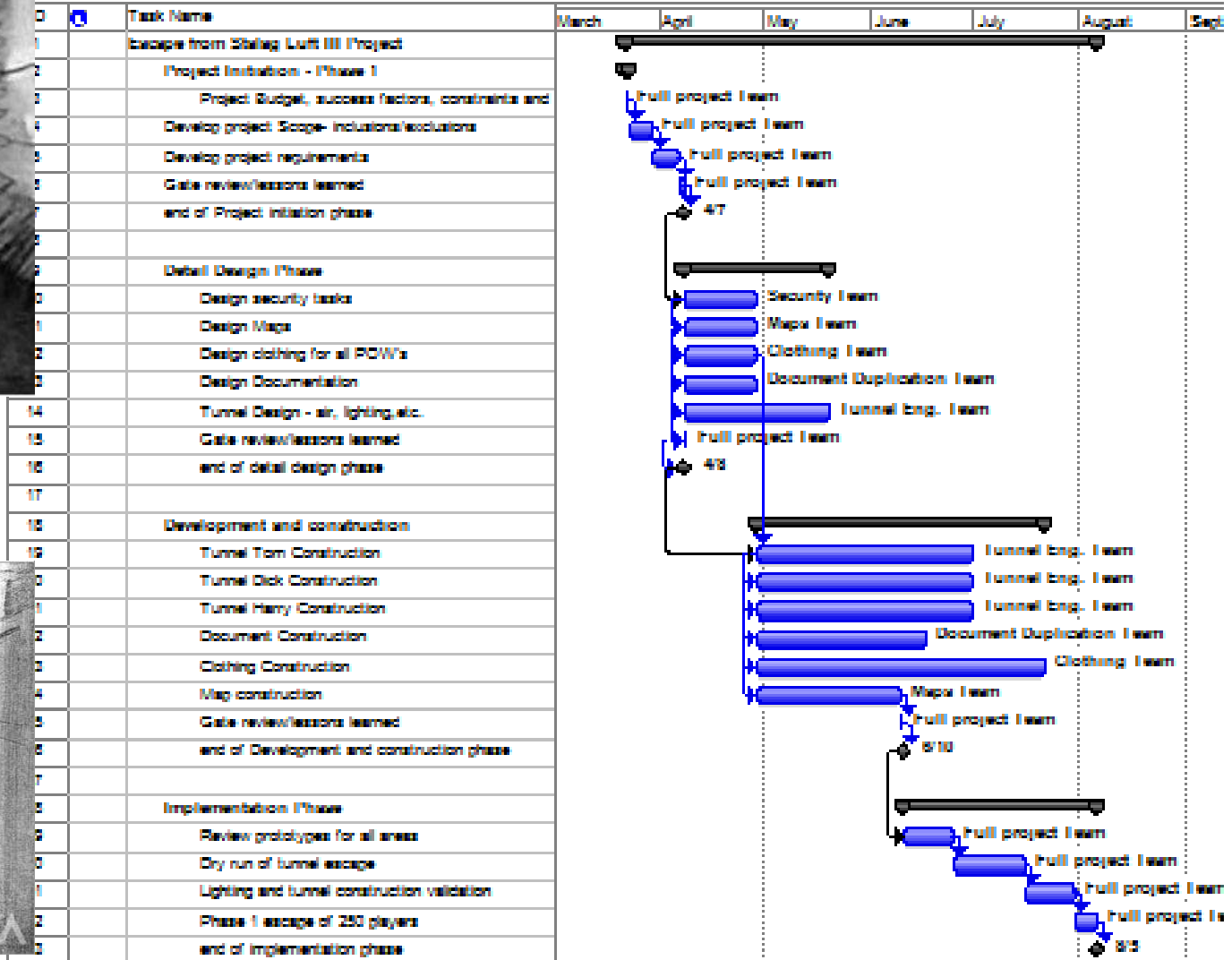
Project constraints

- Limited amount of time to dig
- Getting rid of the excess dirt from the tunnel
- Limited knowledge of the area surrounding the camp
- Working against time. The more time it takes to complete the tunnel, the greater the chances of getting caught.

Project assumptions

- All 250 captives will escape – If false, the project is only partially completed
- The end of the tunnel will reach the woods – If false, will complicate escapes and increase the chances of getting caught

Some include schedules for the project



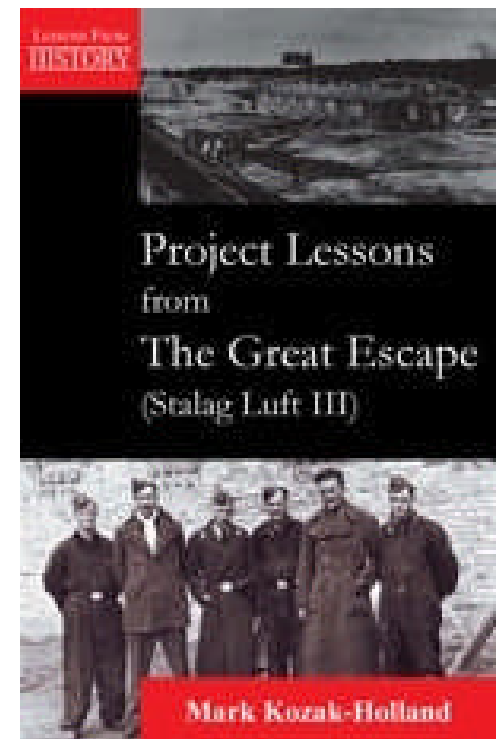
Students post their scope statement for peer review

- Discussions and critique are encouraged
- Personal project experiences (good and bad) start to appear and get discussed in detail

Responses			
	Subject	Author	Date/Time*
	Great Escape Case Results	Carlo Temnas	3/26/2010 7:52:14 PM
	RE: Great Escape Case Results	Instructor Kaufman	3/28/2010 3:41:14 PM
	RE: Great Escape Case Results	Giles Levy	3/28/2010 5:16:37 PM
	RE: Great Escape Case Results	John Carlson	4/2/2010 8:45:17 PM
	RE: Great Escape Case Results	Don McCall	4/2/2010 10:28:36 PM
	Great Escape Results and Proposal	Tony Valentine	3/27/2010 9:33:00 PM
	RE: Great Escape Results and Proposal	Instructor Kaufman	3/28/2010 3:35:42 PM
	RE: Great Escape Results and Proposal	Tony Valentine	3/29/2010 1:57:39 PM
	RE: Great Escape Results and Proposal	Instructor Kaufman	3/29/2010 4:08:32 PM
	RE: Great Escape Results and Proposal	Teaching Assistant Kozak-Holland	3/29/2010 6:04:30 PM
	RE: Great Escape Results and Proposal	Tony Valentine	3/30/2010 6:49:21 AM
	RE: Great Escape Results and Proposal	Don McCall	3/30/2010 9:57:39 AM
	Team Member Question - Help Please	Giles Levy	3/28/2010 6:29:32 PM
	RE: Team Member Question - Help Please	Teaching Assistant Kozak-Holland	3/28/2010 7:56:24 PM

Week 2 – Tasks relate to an understanding of the PMI 9 knowledge areas through two discussions and case analysis presentation of the Great Escape book.

- First discussion will be about the remaining chapters in the Great Escape book. Post your questions about the book or the events to the on-lines.
- For example:
 - Hey Mark –
I was thinking that there could be a 2nd escape plan - once all the initial POW's got out of the tunnel, perhaps a 2nd group, despite not having documents and civilian clothing, could also attempt to escape so as to make it that much more difficult to apprehend all of the 1st group, and necessitate the need for more German resources to round-up the lot. Maybe the success rate would have been a bit greater.
Tom
 - Teaching Assistant Kozak-Holland 3/26/2010 10:33:21 PM
 - Tom,
good thinking, there are some interesting what ifs. I think one of the most important things they missed was a strategy for closing the tunnel and reusing it.
Mark KH



Week 2 – These tasks lead to discussions and debates about the what-ifs in the project.

– For example:


- I'd like to point out that this Scope Statement is very different from some of the others that I've done in previous classes. For example, how do you apply a budget and a cost estimate to a project that occurred in a prison camp?

Norman

- Teaching Assistant Kozak-Holland 3/26/2010 10:53:01 PM

- Norman, Cost Management was the most difficult are to crack as a PMBOK KA. It was only after conversations with ex-POW George McKiel and he explained how Bushell had put a budget together. The concept of free man power is a misnomer. We can discuss on our call.

Mark KH

FOOD PARCELS		
ONE PER WEEK ONE MAN		
RED		CROSS
BRITISH	AMERICAN	CANADIAN
Condensed Milk 1 can	Powdered Milk-1lb. 1 can	Powdered Milk 1 can
Meat Ball 1 can	Spam 1 can	Spam 1 can
Meat & Vegetable 1 can	Corned Beef 1 can	Corned Beef 1 can
Vegetable or Bacon 1 can	Liver Paste 1 can	Salmon 1 can
Sardines 1 can	Salmon 1 can	Choco-8 Oz. 1 can
Chick-a-Dee 1 can	Flour 1 can	Butter-16 Oz. 1 can
Margarine or Butter 1 lb.	Margarine-16 oz. 1 can	Biscuits-16 oz. 1 box
Ham 1 lb.	Biscuits-16 oz. 1 can	Calve-16 oz. 1 box
Apples 1 lb.	Rescue Cutce-8 oz. 1 can	Jam 1 can
Oranges 1 can	Can of Orange Juice 1 can	Prunes-8 oz. 1 box
Cocoa 1 can	Prunes of Raisins 1 can	Raisins-8 oz. 1 box
Tea-2 oz. 1 box	Sugar-4oz. 1 box	Sugar-8 oz. 1 box
Dried Fruit or Pudding 1 can	Chocolate-4oz. 2 bars	Chocolate-3 oz. 1 bar
Supper 1 bar	Soap 2 bars	Soap 1 bar
Chocolate 1 bar	Cigarettes 5 pack	
Soap 1 bar		

REICH ISSUE		
WEEKLY RATION		
Army Bread-1 loaf	2100 grams	Soup-Oatmeal, Barley or Tea 3 times
Vegetable-Potatoes	600 grams	Cheese 48 grams
Other Season 2		Sugar 175 grams
Meat	375 grams	Butter 210 grams
Flour-1000 grams		Salt



Week 2 – Tasks continue with a second discussion about the whole book.

- You will provide your case Executive Summary about the results and copy of your presentation.
 - The presentation will be your case analysis that demonstrates usage of the PMI 9 knowledge areas.
 - The presentation written is from one of the suggested roles.
 - The discussions and presentations will be made available to the book author, Mark Kozak-Holland.

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Great Escape case results

- **Use your scope statement, analysis work to answer these questions:**
 - Was the project successful?
 - Did it meet its objectives?
 - How do you support your position?
 - Did you need to revise your project scope?



Great Escape case results

- **POV, Point of View: Put yourself in position or role**
 - Military officer writing up a report after the war,
 - local farmer near the camp telling their family a story,
 - person researching or writing a book about the events,
 - reporter writing a magazine short story,
 - experienced project manager, survivor of the camp, or a
 - member of memorial committee preparing a write up for inclusion in the display.
- **Also comment on at least 2 other students with a role that is not the same as yours.**

Sample set of case results



Analysis from a POW Survivor

- Additional benefits of The Great Escape:
- It provided a great sense of accomplishment to the officers by participating in the war effort from inside the compound.
- It gave hope to many other POWs that escape was possible.
- It provided a "reason to live" for many POWs that would have faced despair and boredom.

Project Integration Management

- Bushel managed the project integration.
- The plan was extremely complex.
- The Great escape had an initiation stage, planning and design, construction and implementation (The escape itself).
- Bushel had daily meetings with his committee leaders to ensure the integration of all areas.

Project Scope Management

- The scope was well planned and managed.
- 3 tunnels were built, providing a contingency if any of the tunnels were found.
- The scope management was agile and changed with the changing conditions in the camp. For example; work was stopped on Dick and Harry, and restarted on Harry after Tom was discovered.

Project Time Management

- Managing the tunneling operations, sand dispersal and the creation of forgeries and escape aids.
- Managing project constraints: manpower available, rate for digging and sand dispersal, weather and seasons.
- Time management had to adjust resources depending on German guard activities or risk of detection.

Project Cost Management

- The cost committee was good at maximizing the supplies: Red cross parcels, personal parcels sent by relatives, general POW distribution of goods.
- Human labour was also part of the cost of the project.
- It was necessary to bribe or blackmail the German guards to obtain resources.
- POWs were extremely resourceful in using what was available as materials for the escape.

Project Quality Management

- Quality was essential for the escape.
- The tunnel had to be checked carefully or it could collapse.
- The tunnel must be built to specifications or it would fall short or go in the wrong direction.
- Forged documents had to withstand extreme scrutiny from checkpoints.
- Clothing, insignia, behavior and languages had to be like the originals in order to avoid detection.

Project Human Resource Management

- The project had 600 resources (POWs)
- The committee evaluated each participant and assigned them per their expertise.
- The committee was good at providing solution due to their expertise in certain areas to improve the overall process.
- For the escape, the most likely people to succeed in the escape were given priority.

Project Communications Management

- Daily meetings were held with the heads of the committees.
- Critical information was only known to a few people so project could be a secret.
- Designation of a "safe" area within the compounds and a communication system when guards approached was invaluable.

Project Risk Management

- There were many risks that had to be managed:
 - Discovery of the tunnel before completion
 - Caving of the tunnel
 - Escaping the camp undetected
 - Avoiding recapture after the escape
 - Death, hypothermia or starvation

Project Procurement Management

- The procurement management was unparalleled:
- Using bed boards for tunnelling support.
- Using coffee and tea for dyeing clothes.
- Creating a ventilation system from milk cans.
- Creating insignia from melted cans.
- Creating seals for forged documents from shoe soles.
- Using bribery or blackmail to obtain what was not available at the camp.

Conclusion

The tunnel was an amazing piece of engineering that was accomplished with great ingenuity and courage by the POWs.

This project exemplifies some of the great qualities of humankind: creativity, innovative thinking, team work and perseverance.

Sample set of case results



Project Overview

- Objectives:
 - Disrupt the German war effort
 - Achieve the escape of up to 200 POW's from Stalag Luft III
- Deliverables
 - Three tunnels, one of which will be used for the escape attempt
 - Forged travel documents and credentials for all escapers
 - Working plans for escapers to make their way out of Germany
- Scope
 - Tunneling plan
 - Prisoner security plan
 - Tools and materials plan
 - Escaper credentials plan
 - Communication plan
 - Procurement plan (bribery and blackmail)
 - Implementation plan



2

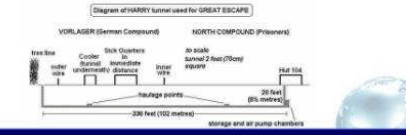
Project Integration Management

- The Project manager, Bushell managed the project integration by adapting all phases dynamically and agilely. He enabled his team leaders to operate autonomously under a very clear understanding of what the outcomes needed to be. Yet he also implemented a communication plan so that all of the teams could coordinate their activities daily.
- Project resources were selected for their experience and skills. The resources were integrated into the project taking advantage of the huge diversity to fill every role.
- Materials were effectively procured through packages sent from home, guards, and scavenging camp facilities.
- Risk, cost, and time were effectively managed with risk as the pivotal consideration. Each cost was spent only when the risk was minimized, such as a guard had been entrusted or blackmailed. Likewise, the timing of the project was flexible and needed to be adapted based on risk.
- Quality management resulted in team member safety during the execution of the tunnel construction and escape preparations. However, Attention to quality faltered during the escape implementation.

3

Project Scope Management

- Bushell and his core team (the Escape Committee) Created the initial scope which was to build 3 tunnels and get enough supplies to launch a 250 person escape.
- As time passed and certain risks presented themselves, the Escape Committee made many adjustments to scope. An example of changing scope is the decision to focus on one single tunnel instead of three simultaneously. This change was made because of the risk presented by the problem of sand dispersal.
- Bushell's adaptable leadership and his core team's abilities to innovate quickly enabled the teams to quickly change direction when necessary.
- The original scope was too ambitious. All of the adjustments made ended up in a reduction in scope. This is especially evident when looking at the actual deliverable versus the project's original objectives. 76 men made it through the tunnels, not the intended 250.



4

Project Communication Management

- Project communication was critical to coordinating daily activities, especially security. The communication process devised by the security team was highly effective in terms of protecting project assets and keeping activities undetected by German guards and "ferrets".
- Project progress and status was conducted daily which allowed Bushell and the Escape Committee to stay on top of risks and implement project plan changes rapidly and effectively.
- Communication was arguably the strongest aspect of this project. Even when the changes were not well thought out (as with the escape implementation), they were well communicated.

5

Project Procurement Management

- Perhaps the second most effective project area was procurement. I almost impossible circumstances, the procurement team was able to obtain an astounding amount of material to complete the project.
- The materials were obtained through scavenging, concealed shipments from home, bartering, bribing, and blackmail.
- In an environment where almost everything was considered contraband, the innovative procurement team was able to provide the necessary materials for the project.



6

Project Human Resource Management

- Bushell, was adept at selecting his core team. With a diverse pool of talent to choose from, he assembled a competent and capable team that was able to lead 600 POW's in concert towards the same goal.
- The diversity of background of each POW allowed the project maximum flexibility.
- Utilization of the large number of people gave the project the ability to adapt and adjust to varying project constraints.



7

Project Risk/Cost/Time Management

- Project Risk was the driving factor in managing cost and time.
- Throughout the project, the risk of getting caught paced the project. As German scrutiny would eb, the cost of procurement and the progress over time would increase. As scrutiny increased, the project slowed.
- Risk factors were also environmental and dictated the timing of project milestones. Tunnel construction happened at opportune times during the day so it would be less noticeable by the Germans, likewise, sand dispersal was conducted at time when foot traffic in the camp was high.
- Project implementation timing was based on minimizing the risk of being seen in moonlight.
- Great care was taken to make sure material were obtained as needed, but not before. As an example, escaper's documents had to be carefully manufactured and dated precisely when the escape attempt would take place.

8

Project Quality Management

- Project quality management primarily protected the lives of the escapers.
- Tunnel construction was dangerous and required a great deal of work to stabilize so the sandy soil would not collapse and kill prisoners. Wood was obtained through scavenging camp furniture and buildings, then used to shore up the tunnels.
- Forged documents were carefully crafted to pass close inspection b authorities outside the camp.



9

What Worked

- Communication was exceptionally well coordinated. Prisoners were able to communicate with each other without detection from their German captors.
- Quality of tunneling was maintained as no prisoners were killed in the construction or use of the tunnels.
- Use and coordination of human resources was very successful and took advantage of the wide diversity of skills and backgrounds.
- Procurement of materials was very productive in spite of the scarcity of resources and the difficulty with arranging delivery.
- Integration management was successful in that all of the project elements were tirelessly brought together to accomplish an unprecedented execution.

10

What Could Be Improved

- Project integration was compromised by the project manager's (Bushell's) short sighted implementation plan. Execution of the preparations went very well, but the lack of testing, an exit plan, and the ad hoc adjustments during implementation proved to be very costly in terms of throughput.

11

Success or Failure

- The project succeeded in one major objective. I disrupted the german military war effort by diverting as many as 70,00 troops to address the escape. This represents a high opportunity cost for the German Army which in turn created a benefit for the allies.
- The project failed to move 200 prisoners through the tunnel. Of the 76 that actually made it through, 50 were shot dead, and 23 were returned to imprisonment. Only 3 made it out completely.
- The project can only be deemed a partial success meeting 50% of it's primary objectives. However, the execution of the project plan identifies a number of critical successes leading up to implementation. The most significant failure was incurred during the last phase of the project, the actual escape.
- This retrospective arrives at the conclusion that the project benefits outweigh the costs. However these benefits were not fully realized until after war's end.



12

Sample set of case results

Analysis of the Great Escape Project Results

Executive Summary

Mike Hill

Was the project successful?? Did it meet its objectives??

- The project met its objective of constructing tunnel and gathering the escape aids. The project was successful because it met every requirement for its final goal of escaping without letting the ferrets know what's going on.
- In the other hand only three POWs were successful to escape to a neutral country which was a major loss. However, 7000 German troops were involved in searching rest of the escapees which is also one of the benefit for them.

The Great Escape Case Analysis

by
Jeremy Baker
ICT 4115

Conclusion

- Was this project successful? My assessment is based on the two objectives.
 - The first one being escaping 220 prisoners to neutral countries was a failure. This is due to the fact that only 35% (76) of the prisoners escaped. In addition, of the 76 that escaped, 50 were executed by the Gestapo. This was a major loss to the POW's. Only 3 of the prisoners navigated to a neutral country.
 - The project was a success in meeting the second objective, to force a substantial search effort among the German military and civilian population. It was estimated that 70,000 Germans were involved in the search of the escapees.

The Great Escape Analysis

Point of View on the PMI knowledge Areas

David Evans
ICT 4115

Conclusion

Was this project successful?

If the escape project judged on the goal of escaping the 220 POWs into neutral land then the project was a fail. But if the mission was to divert the Germans and as more than 70.000 went looking for the escapees the project was successful.

The Great Escape: Case Analysis

Prepared by
Sally Neilsen
ICT4115 Project Management in Practice
25 Jan 2009

Conclusion - Failure

However the project failed with regard to cost. The lives of 50 good men were sacrificed as a result of project completion. No project's success is worth sacrificing 50 human lives, and thus, the project was a failure.



Table of Contents

- **This presentation will describe:**
 - What the course is about?
 - Why the Great Escape book was selected?
 - How and where it is used in the course?
 - When the course is run?
 - Outcomes
 - Reviews of the Great Escape book

When the course is run?

- **Course runs every quarter, previous and future courses:**

- Jan 09
- Jun 09
- Sep 09
- Mar 10
- Jun 10
- Sep 10

- **Course Instructor**

- Raymond Kaufman
- e-mail addresses: Raymond.Kaufman@du.edu and rkaufman1149@yahoo.com
- 2380 South Ellis Court Phone: (303) 716-1039
- Lakewood, CO 80228 Cell: (303) 472-3751

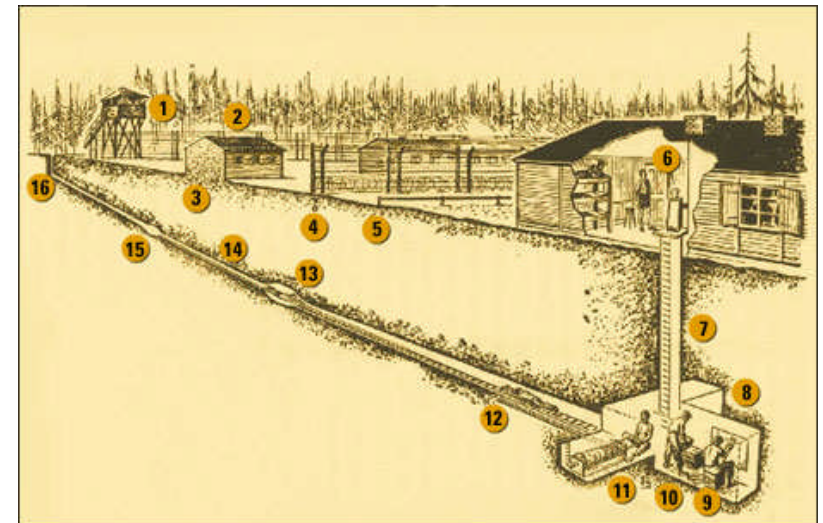
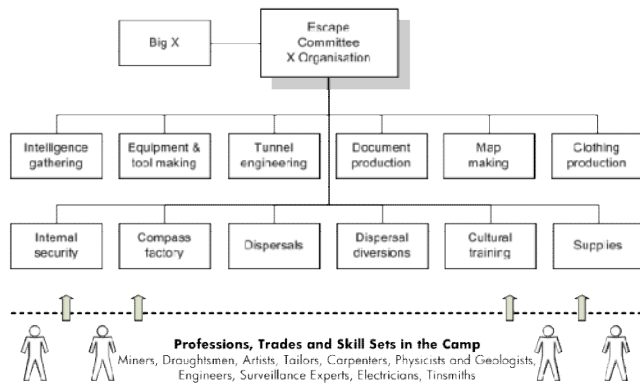
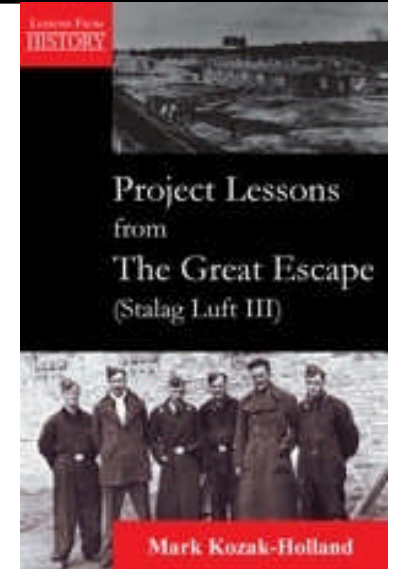
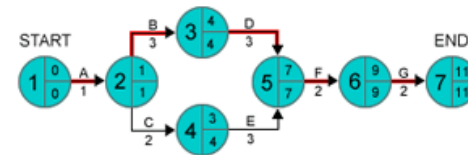


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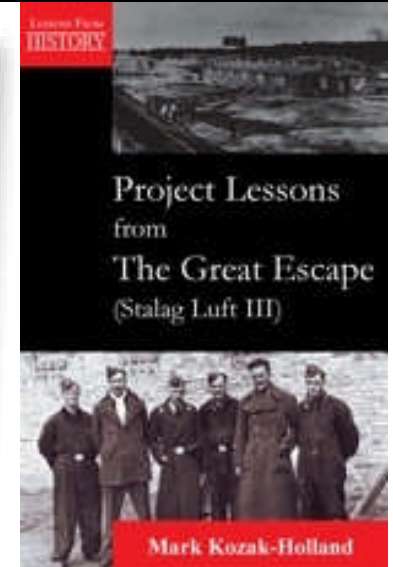
Ray Kaufman talks about the book

- *“Are you looking for book to help show other how to identify and use project management principles?”*
- *Seeking examples of project management principles or categorizations?*
- *You have found it. I teach at the Graduate School level and we used the book, its story, ideas and examples to understand project management.” RK*



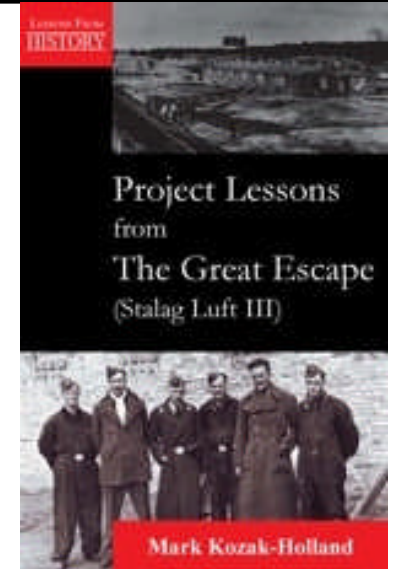
Ray Kaufman talks about what his students thought of the book

- *“My students read the book, praised its content and examples. We liked how the author made it project management practical. He showed us how to recognize issues and use it today.” RK*



Ray Kaufman talks about he why would recommend the book?

- “The book is a quick read, good story that provides practical examples on the usage of project management. You identify with the people in the story and it makes it memorable. The book provides guides to the PMI 9 knowledge areas and sets understandable standards.” RK*



	I	P	E	M	C
I	1	2	3	4	5
S	7	10			
T	12	17			
C	18	20			
Q	21	22	23		
H	24	25			
C	28	29	30	31	
R	31	32			
P	39	40	41	42	

Integration	1	Develop Project Charter
	2	Develop Project Management Plan
	3	Direct and Manage Project Execution
	4	Monitor and Control Project Work
	5	Close Project or Phase
Scope	7	Collect Requirements
	8	Define Scope
	9	Create WBS
	10	Verify Scope
Time	12	Define Activities
	13	Sequence Activities
	14	Estimate Activity Resources
	15	Estimate Activity Durations
Cost	18	Estimate Costs
	19	Determine Budget
	20	Control Costs

Quality	21	Plan Quality
	22	Perform Quality Assurance
	23	Perform Quality Control
Human Resource	24	Develop Human Resource Plan
	25	Acquire Project Team
	26	Develop Project Team
	27	Manage Project Team
Communications	28	Identify Stakeholders
	29	Plan Communications
	30	Distribute Information
	31	Manage Stakeholder Expectations
	32	Report Performance
Risk	33	Plan Risk Management
	34	Identify Risks
	35	Perform Qualitative Analysis
	36	Perform Quantitative Analysis
	37	Plan Risk Responses
Procurement	38	Monitor and Control Risks
	39	Plan Procurements
	40	Conduct Procurements
	41	Administer Procurements
	42	Close Procurements



Brief Bio/Profile of Ray Kaufman

- Raymond has over 15 years of program and project management experience. Currently, he is an Information Technology Project Manager at a pre-mortgage processing company. Also he works as a Technology Vice President of Momentous Happenings LLC, an event planning firm and as an independent Project Management Consultant.
- He has over 25 years of expertise in sales, marketing, finance, management and technology. He has worked for his own companies, startups, small, medium and large organizations like Sprint Nextel, GE, Citi Bank, American Express, CSC, and retail stores. Raymond has received numerous recognition and top performer awards. He has an MBA from University of Phoenix and a BSBA from Xavier University. His professional certification is a PMP from the Project Management Institute. He has a patent pending on ideas, process and software to aid the processing of back office paperwork and image processing.
- Raymond is married for over 25 years and has 3 children. He is an avid social network user. He has lived in over 10 US states and overseas. He likes to take cruises, hike and ski. He spends his extra time helping a local charity and as a mentor.

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Reviews of the Great Escape book

- **by Tami Morton, August 10, 2009**

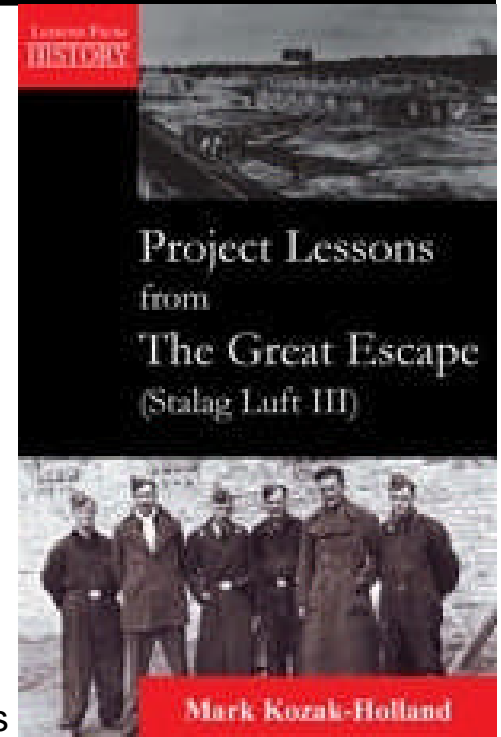
- Despite my reservations, I really enjoyed reading the book on The Great Escape...It was really enlightening to assess the project management tools that were intuitively applied back then. Aside from a couple of bad assumptions towards the end, they obviously developed a brilliant plan and methodology for successfully completing the project.

- **by Colin Konrad, August 10, 2009**

- Excellent book, I almost read it cover to cover after viewing the original movie. The actual story portrays the harsh realities the POWs faced in real life as opposed to the heroics of Steve McQueen in the movie. Having studied Project Management in several courses this book is the most interesting application of project management I have read. Thanks for an interesting read.

- **by Eric Peterson, January 17, 2009**

- If we could somehow get this type of writing about history into the public schools I think that children would only learn facts about significant events, but would also retain it because all the wonderful examples. I really feel that I learned not only some history about the great escape, but also see the PMBok applications that were used. This is a great method of teaching and learning!!



Reviews of the Great Escape book

- **by Michael Dohrmann, August 10, 2009**

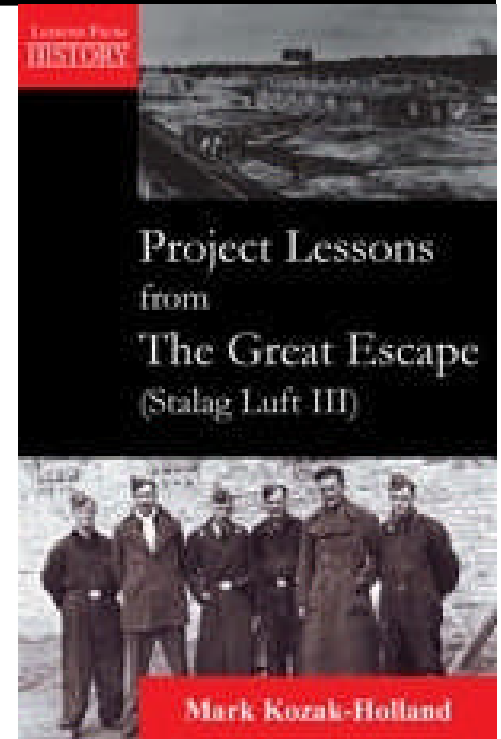
- I've actually seen the movie a few times in my life, and it was great to view it now from the perspective of a project manager. It was even more impressive to watch it now. I could not put the book down - it's a very quick read and extremely fascinating - so I went ahead and finished it...I think what really strikes me is how much the Great Escape really followed many of the PM principles that didn't even exist at the time. Roger Bushell was a pretty incredible project manager.

- **By Linda F. Desmond, PMP, PM Trainer President of Mass Bay Chapter, PMI**

- "This book and others by Mark Kozak-Holland are a tremendous resource for educators-the stark reality of failed projects and Mark's detailed research, historical accuracy, and the link to the PMBOK, helps us to analyze and understand we are not alone in managing our complex projects today. The incredible resourcefulness and bravery of these men gives us hope on our own troubled projects.

- **by Richard Warner, January 17, 2009**

- I thought this was an excellent book. It took project mgmt and applied it to a real life or death scenario. Unlike most text books this was so easy to read and enjoyable. I found after reading it that I actually picked up the project mgmt concepts and seemed to retain them better than I do when reading "dry" text books. I have to go back and read those 2 or 3 times to get the concepts but writing in this manner definitely helped me learn more. I have seen the movie numerous times and to actually read about what really happened was very eye opening.



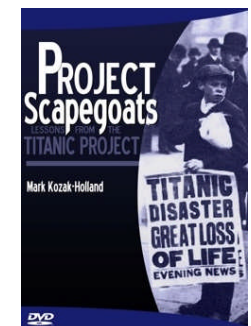
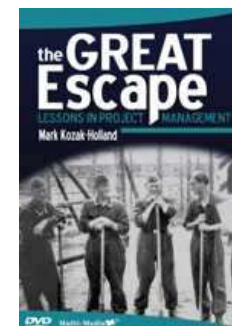
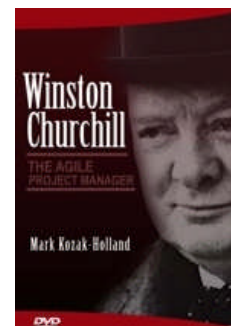
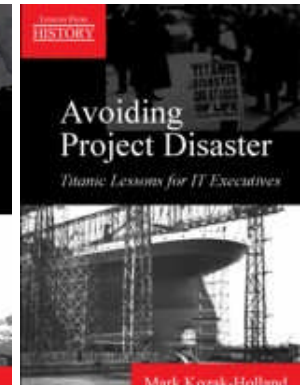
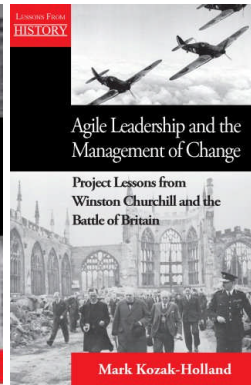
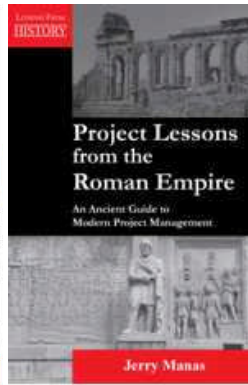
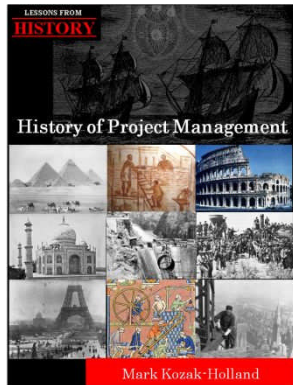
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- **Publications**

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- *Articles*
- *Books*
- *CDs, DVDs*



Lessons-from-History series philosophy & mission

- **The series vividly describes the crucial lessons from historical projects and compares these to today's best practices. It makes the whole learning experience more memorable. The series should inspire the reader as these historical projects were achieved with a lesser technology.**
- **The series looks at historical projects and:**
 - Outlines the project background, drivers (business), financials, and return on investments.
 - Defines how these projects were managed, the approach, and methods.
 - Looks at challenges and accomplishments with examples of phases, results, or tasks.
 - Investigates alternatives, options available, and key decision making that took place.
 - Examines deliverables (outputs) and works backwards as to how these were achieved.
 - Provides analogies of problem solving using emerging technologies and their application.