

# **Military Geologists and the German Afrika Korps 1940-43**

**J. David Rogers**

University of Missouri-Rolla

# Outline

- **German Military Geologist Organization**
- **German Military Engineers**
- **Afrika Korps**
- **Summary**
- **References**

# German Military Engineer School



**The building was a German military engineers' school in the late 30s.**

**Then, the site of the Armistice signing in May 1945.**

**Soviet General Marshall Zhukov also used it as his headquarters after World War II.**

# Military Engineer School



# German Afrika Korps

- **Commanded by Field Marshal Erwin Rommel**
- **Operated in Africa from 1941 – 1943**
- **Operation Torch, Nov 1942, opened up a second front on the Afrika Korps**
- **Germans, surrounded at Tunis and Bizeret by land and sea, begin surrendering in May 1943**
- **FM Rommel was withdrawn to Greece in Mar 1943 to organize defenses there**



# Northern Africa Geography



# North African Geography



# Terrain Feature Challenges

On land or at sea, the terrain challenged operations continuously.



First widespread use of half tracks





# Water Requirements



**One person requires 1 gal/day of water in the desert.**



# Adapting to Environment



- Tents with flaps rolled up.
- R&R in Mediterranean



# Adapt and Overcome



**Germans used camels for logistics when possible.**



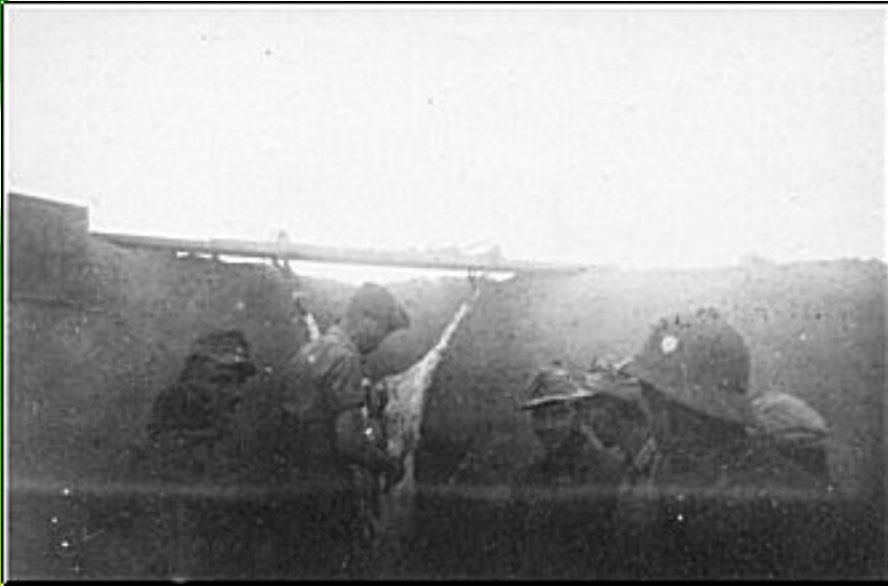
# Other Adaptions



**Dig, man, dig!**



# In the Trenches



**Casualties in the African Campaign for the Germans totaled 18,594 killed and 3,400 missing.**



# Blitzkrieg Engineers

- **German military engineers, road builders, and demolition squads created paths for the German Army to move quickly.**
- **They blazed roads and paved highways to enable force mobility, using their armor effectively in a series of flanking maneuvers .**



# Assessing Trafficability



**Tracked vehicles allowed far greater mobility through rough terrain and bomb damaged urban areas**

# Other Transportation Difficulties



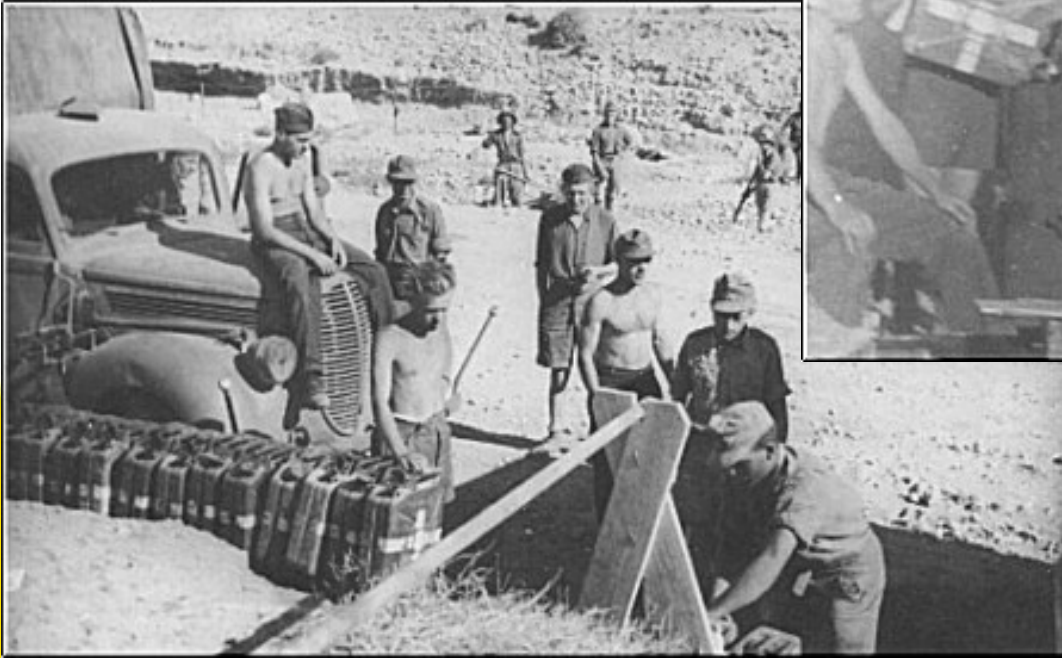
**Mud? In the desert?**

**The BMO at work.**





# The 5 gallon “Jerry Can” was developed by the Germans for their Afrika Korps



# Finding Water



**German geologists interviewed natives to find water sources.**

# Mixing materials



# Rommel on inspection tour



# SUMMARY

- **Germans recognized importance of geological information during time of war by compiling comprehensive manual on War Geology in 1938.**
- **German geologists integral part of Army engineering activities in all theaters of World War II.**
- **Geologists also utilized in logistical support and design and construction of defensive works.**
- **Afrika Korps operations turned on logistical support, navigation and deception. Geologist's knowledge was incorporated into maneuver planning and positioning of defenses.**

# REFERENCES

- *Military Geology in War and Peace* by James Underwood, The Geological Society of America, Boulder, CO
- *Wehrgeologie* by Dr. Kurd von Bulow, translated by MAJ Walter Kranz, Ph.D, and MAJ Erich Sonne, Quelle and Mayer Publishing House, Leipzig
- <http://www.museum-karlshorst.de/>
- <http://www.essaybank.co.uk/>
- <http://www.ww2battles.com/afrikakorps/dak/>
- <http://www.desertusa.com/mag99/mar/stories/desertsur.html>